

HINDUSTAN COPPER LIMITED

(A Government of India Enterprise)

TENDER DOCUMENT FOR ENGINEERING, PROCUREMENT AND CONSTRUCTION FOR SHAFT DEEPENING, EQUIPPING AND INSTALLATION OF ORE HANDLING SYSTEM AND ALLIED EXCAVATIONS AT KHETRI MINE, KHETRINAGAR, RAJASTHAN

No.: HCL/M&C/KHETRI/SHAFT/2017/01 Dated 18.10.2017

HINDUSTAN COPPER LIMITED (A Government of India Enterprise) 'Tamra Bhawan' 1, Ashutosh Chowdhury Avenue KOLKATA 700019

NOTICE INVITING TENDER

Tender Notice No.: HCL/M&C/KHETRI/SHAFT/2017/01 Dated 18.10.2017

Hindustan Copper Limited (HCL), a Public Sector Undertaking under the administrative control of the Ministry of Mines, was incorporated on 9th November 1967. It is the only vertically integrated copper producing company in India with presence in mining, beneficiation, and smelting, refining and downstream saleable products. HCL holds all the operating mining leases of copper in India.

HCL invites e-Tenders under two bid system from reputed and experienced contractors for engineering, procurement and construction for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan over a period of 60 months (including 4 months of mobilization period). The interested contractors are requested to note the following:

- 1. Under two bid system, the first bid (the "Techno Commercial Bid") of the process involves qualification of interested parties in accordance with the provisions of the pre-qualification criteria (PQC) stipulated in the tender and the second bid is the "Price Bid". The offers are to be submitted on line at URL https://eps.buyjunction.in of M/s. Mjunction Services Limited, Kolkata, who are our service provider for Enterprise Procurement System. The documents pertaining to "Techno Commercial Bid" (only Part I Bid) are to be submitted in sealed packet at address mentioned in Tender. The price bid at above e procurement portal will be opened only of those bidders who qualify techno commercially. Please refer clause no.2.6 for detailed procedure for submission of offers.
- 2. The Tender document can be purchased from the office of the Executive Director (Commercial), HCL, Kolkata as per clause 1.13 on any working day on payment of Rs 5000/- (Rupees Five Thousand only) through non refundable demand draft/banker's cheque in favor of "Hindustan Copper Limited", payable at Kolkata. The bidders purchasing the document from HCL shall submit along with the Part-I bid of the tender, the original receipt for payment of Rs 5000/- (Rupee Five Thousand only) to HCL towards the cost of the tender document. Tender document can also be downloaded from the HCL website (http://www.hindstancopper.com). Bidders who download the tender document from the HCL website must submit a tender document fee of the same amount (Rs 5000/-) in the form of a non-refundable demand draft/banker's cheque drawn on any schedule commercial bank payable at Kolkata along with their Part-I bid of the tender. The tenders not accompanied by the tender document fee as specified above shall be considered as non-responsive and summarily rejected.

3. Addresses for Communication:

a. Interested bidders may obtain further information from:

Executive Director (Materials & Contracts)
Hindustan Copper Limited
'Tamra Bhawan'
1, Ashutosh Chowdhury Avenue
Kolkata – 700 019
Email dkmahajan@hindustancopper.com

Email <u>dkmahajan@hindustancopper.com</u>

Tel: +91 33 22900397 Mobile: +91 94330 01147

b. The e bids (including the Part – II Price Bid) have to submitted in the e tendering portal and the documents pertaining to Part – I (Techno Commercial Bid) of the tender must be submitted on or before as per schedule mentioned in **clause 1.13** at the above mentioned address or dropped in the tender box located on the 3rd floor of 'Tamra Bhawan'.

The Tenders shall be opened as per schedule mentioned in **clause 1.13**. However, in the eventuality of the day of opening of the tenders becomes a non-working day due to a force majeure event, the date of opening of the tenders will shift to the next working day at the same time.

c. All communications, including the tenders should have the following information super scribed at the top of the packet in bold letters:

"TENDER No.: HCL/M&C/KHETRI/SHAFT/2017/01 Dated 18.10.2017

Shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan"

The name and address of the bidders should be clearly mentioned at the left side of the packet.

d. Official website for notices:

All notice related to this tender including Clarifications / Amendments / Corrigendum to the tender document shall be available on HCL website http://www.hindustancopper.com under the heading "Tenders".

(D K Mahajan) Executive Director (Material & Contracts) For Hindustan Copper Limited

DISCLAIMER

The information contained in this tender document or subsequently provided to bidder(s), whether verbally or in documentary or in any other form by or on behalf of Hindustan Copper Limited ("HCL") or any of its employees or advisors, is provided to bidder(s) on the terms and conditions set out in this tender and such other terms and conditions subject to which such information is provided.

This tender is not an agreement and is neither an offer nor invitation by HCL to the prospective bidders or any other person. The purpose of this tender is to provide interested parties with the information that may be useful to them in making their financial offers pursuant to this tender (the "Bid"). This tender includes statements, which reflect various assumptions and assessments arrived at by HCL in relation to the Work (as defined in the tender). Such assumptions, assessments and statements do not purport to contain all the information that each bidder may require. This tender may not be appropriate for all persons, and it is not possible for HCL, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this tender. The assumptions, assessments, statements and information contained in this tender may not be complete, accurate, adequate or correct. Each bidder should, therefore, conduct its own investigations if any required with respect to the tender and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this tender and obtains independent advice from appropriate sources.

Information provided in this tender to the bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. HCL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

HCL, its employees and advisors make no representation or warranty and shall have no liability to any person, including any bidder or bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the tender and any assessment, assumption, statement or information contained therein or deemed to form part of this tender or arising in any way in the bid stage.

HCL also does not accept liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any bidder upon the statements contained in this tender.

HCL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this tender. The issue of this tender does not imply that HCL is bound to select a Bidder or to appoint the selected bidder for the work and HCL reserves the right to reject all or any of the bidders or bids without assigning any reason whatsoever.

The bidder shall bear all its costs associated with or relating to the preparation and submission of its bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any

demonstrations or presentations which may be required by HCL or any other costs incurred in connection with or relating to its bid. All such costs and expenses will remain with the bidder and HCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a bidder in preparation or submission of the bid, regardless of the conduct or outcome of the bidding process.

The bidders are prohibited from any form of collusion or arrangement by a bidder (or its advisers or consultants) in an attempt to influence the selection and award process. Giving or offering of any gift, bribe or inducement or any attempt to do any such act on behalf of the bidder towards any officer/employee of HCL or to any other person in a position to influence the decision of HCL for showing any favour in relation to this tender or any other contract, shall render the bidder liable to such penalty as applicable under applicable law and as HCL may deem proper, including but not limited to rejection of the bid and forfeiture of its bid security (as defined in the tender).

This tender shall be governed by the laws of India.

Each bidder's acceptance of delivery of this tender constitutes its agreement to, and acceptance of, the terms set forth in this disclaimer. By acceptance of this tender, each bidder agrees that this tender and any information herewith supersedes document(s) or earlier information, if any, in relation to the subject matter hereof.

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HINDUSTAN COPPER LIMITED (A GOVT OF INDIA ENTERPRISE)

TENDER DOCUMENT

VOLUME-I

SECTION I

TENDER INVITATION

1. INTRODUCTION

1.1 HCL, a public sector undertaking under the administrative control of the Ministry of Mines, Govt. of India, was incorporated on November 09, 1967. It is the only vertically integrated copper producing company in India with presence in mining, beneficiation, and smelting, refining and downstream saleable products.

1.2 **BRIEF DESCRIPTION OF KHETRI MINE:**

Khetri copper mine ("Mine") is one of the main mines of HCL in the Jhunjhunu district of Rajasthan. The Mine was developed in the seventies to a depth of about 400 m from surface up to 0 m RL (coinciding with mean sea level). Production levels are developed at 60 m interval. The Mine has two main accesses – one service shaft and another production shaft. Ore from different production levels is directed to lowest level i.e. 0 m RL wherefrom it is hoisted the surface through a friction winder after crushing to minus 150 mm size through a jaw crusher.

Current operations reached to 0 m RL. The Mine contains about 43 million tonne ore up to (-) 180 mRL. To mine this ore at an optimum rate, depth extension of the Mine is necessary. It is therefore planned to deepen the existing shafts to a further depth of 180 m and equip and install, ore handling system and allied excavations and mine development as phase II (the Project").

For more technical details, status of the mine and production and development programme, please refer Volume II of the Tender.

1.3 **SCOPE OF WORK:**

1.3.1 The Selected Bidder shall be responsible for the activities mentioned below: (Necessary schematic drawings are attached)

- 1.3.1.1 **PRODUCTION SHAFT:** This 5.5 m diameter circular shaft equipped with Koepe friction winder of 2,800 kW capacity with 6 (six) no of ropes with 25mm dia full locked coil type. The shaft extends to a depth of 475.5 m, from surface 390 mRL to (-) 85.5 mRL. It is concrete lined and used for ore hoisting through 14 tonne skips and ventilation return. The shaft will be deepened to a further depth of 140 meters, from (-) 86 mRL to (-) 226 mRL with extension of ore hoisting facility.
- 1.3.1.2 **SERVICE SHAFT:** Service shaft is a rectangular shaft of 6.11 m x 4.93m. The shaft extends to a depth of 388.42 m from surface [370 mRL to (-) 18.42m RL]. Main production levels of the Mine were developed from this shaft at 300 mRL, 240 mRL, 180 mRL, 120 mRL, 60 mRL and 0 mRL. The shaft is equipped with a double drum winder of 1,600 kW capacity and served by a double deck cage having a capacity of carrying 88 persons. The shaft is used for men, material winding, and waste rock hoisting and main ventilation intake. The shaft is RCC lined and is equipped with rigid guide rails of 60 lbs/yd, ladder way and service lines for compressed air, water, power cables. Two number of rope is used in Service Shaft winder. Two nos of double deck cage are used. The diameter of the rope used is 51 mm of Langs Lay type.

In this Project, the shaft will be extended by deepening and equipped to a further depth up to (-) 196 ML and the winding extended to serve up to (-) 196 ML. Main production levels are at 60 m interval below 0 mRL to (-) 180mRL will be developed from the shaft. Insets of size 5.5 m width x 3.0 m height will be developed 50 m at (-) 120 ML & (-)180 ML. 30m inset of 5.5m x 3.0m is already developed at (-)60ML another 20m of 5.5m x 3.0m size will be developed by the successful bidder. Landing keps will be fixed at (-) 60ML, (-) 120 ML & (-) 180 ML. At (-) 180ML the ore pass which is already existing between 0 mRL to (-) 300 mRL, service shaft and production shaft shall be connected by drive of size 3.5m x 3.0m of length 1020 m.

- 1.3.1.3 **ORE HANDLING SYSTEM:** Ore from various production levels will be directed towards (-) 180 mRL through an ore pass. The ore will be crushed by a jaw crusher at (-) 196 mRL. The crushed ore will be transferred to a surge bin by a belt conveyor and then passed through measuring hoppers and loaded into skips for hoisting.
- 1.3.1.4 **SERVICE WINZE:** A service winze of 300 meter depth of 3 m diameter from 0 mRL to (-) 300 mRL is already developed for levels below 0 mRL. This service winze shall be equipped by the successful bidder. Initially this service winze shall be utilized for the hoisting of waste rock generated during the excavation of crusher chamber, surge bin, excavation for measuring hoppers, control systems, (-) 180ML, (-) 205ML etc till the service shaft is commissioned up to (-)180ML.
- 1.3.1.5 **ORE HOISTING SYSTEM:** The ore pass system will take care of all the ore generated from 180ML to (-) 180ML.

In this contract the successful bidder has to develop an ore pass from below the sink which will be sunk from 0ML to (-) 80ML and will be operated by another contractor to develop (-) 60ML.

A drop raise can be made from (-) 120ML to (-) 180ML and then connected by another drop raise from (-) 80ML to (-) 120ML.

Finally an incline raise will have to connect from 0ML between waste pass (180 ML to 0 ML) and newly developed ore pass [0 ML to (-)180 ML] to convert it in to complete single ore pass from 180 ML to (-)180 ML.

- 1.3.1.6 AUXILIARY/SPILLAGE HANDLING SYSTEM AT PRODUCTION SHAFT: A vertical shaft will be sunk between (-) 180 mRL to (-) 226 mRL for spillage reclamation. A man winding single drum hoist with bucket will be provided at (-) 180 mRL to hoist the spillage below the shaft from (-) 226m RL.
- 1.3.1.7 **MISCELLANEOUS EXCAVATIONS:** In addition to the excavations mentioned above, other excavations will be required for insets in shaft, approach to waste pass at each level, connection between the service shaft and the production shaft at (-) 180 mRL, sumps, electrical sub-stations etc.
- 1.3.1.8 **WASTE HOISTING ARRANGEMENT AT 180 ML:** The waste rock generated during execution of this contract will be transferred to the waste pass at 0 ML to be hoisted up to 180 ML and then dumped into void stopes. The arrangement from 0 ML to 180 ML is already developed. Waste rock hoisting winder has been installed by the present contractor and being utilized for hoisting of waste rock.

While converting waste pass (from 0ML to 180ML) to ore pass by incline raise, service shaft will be provided for waste rock hoisting. This activity will come at the time of final commissioning of the crushing system.

The present status of these activities is mentioned in Vol. II of the Tender documents.

- 1.3.1.9 In this project of expansion there are several winders with electrical which were installed and being operated by the outgoing contractor. They are:
 - i) 250KW single drum electric winder with bucket at 180 ML operating between 0 ML to 180 ML (180 m)
 - ii) 250KW single drum electric winder installed at 0 ML service winze operating between 0 ML to (-) 300 ML
 - iii) 55KW single drum winder with electrical installed at 0 ML for service shaft operating between 0 ML to (-) 60 ML incline.

iv) 75KW single drum electric winder at (-) 60 ML being installed (winder fixed on foundation and pulley fixed) to operate between (-) 60 ML to (-) 196 ML.

These winders with electrical and other installations would remain in the same position for the successful bidder to work with, as fresh excavations or excess alterations in foundations can't be redone in the same location being in underground space constraints.

(The bidders will be offered the sale price of the above winders with associated fittings after pre bid meeting to take over the winders with electrical and other installations in the installed positions which are designed to take care of the sinking depth and mine development under the scope of work of this contract. No explicit payment will be made towards these winders. The cost incurred on account of winders, electrical and other installations may be distributed in sinking, mine development and other excavations.) This needs discussion about the transfer of assets.

However, these winders are needed only till the commissioning of the Second Phase Project. The successful bidder has to dismantle and remove these installations after the commissioning of the Project. Corresponding cost of dismantling and removal may be quoted in the BOQ accordingly.

The winder installed in service winze (Sl. No. ii above) shall be left in place after completion of the job with other installations in good working condition and depreciated price in this regard may be quoted separately in BOQ.

All equipment and accessories requiring permission under the law for the contract must be approved by the DGMS, India for use in the mine. Approval has to be obtained by the Contractor at his own expenses and a copy of the same has to produce to HCL.

The application to DGMS for carrying out the proposed mining activity would be put up by HCL with the help of the Contractor. HCL as lessee of the mine would put up application and the Contractor being the Contractor will provide all necessary assistance to HCL for obtaining the DGMS approval. Cost of obtaining such approval shall be borne by the Contractor.

- 1.3.2 The scope of work will cover the following area of operations under the supervision of an Engineer-in-Charge of HCL:
 - 1.3.2.1 **Production Shaft Deepening:** Deepening of Production Shaft with complete lining, equipping, design, engineering, procurement, supply, fabrication, loading, unloading, storage, erection, testing, commissioning, integration with the existing system, carryout of performance guarantee tests and maintenance for 18 months (warranty period) for ore

hoisting including crushing system and equipment including electrical instruments, instrumentation and other utilities, structural and civil foundation.

The sinking of the Production Shaft will commence by driving a level from (-) 106 ML from the BGML Shaft which is a 3.4 m dia shaft equipped with a ladder way and 30 lbs/yd guide rails with bucket.

At (-) 106 ML a suitable winder can be installed for production shaft sinking up to (-) 226 ML. The blasted muck will be hoisted to (-) 106 ML and emptied into a waiting bucket. This bucket will be trammed to (-) 106 ML BGML Shaft to be hoisted.

Existing bottom of the shaft is at (-) 85 ML and filled with debris and other material, this needs to be cleaned by the contractor before removing the plug. Winder installation at (-) 106 ML as per DGMS requirement with all electrical and safety devices will be contractor's responsibility. The Production shaft will be furnished and equipped from 0 ML to (-) 226 ML and will be integrated with the existing System. However, the guide ropes and the winding ropes would be finally fixed from surface to (-) 226 ML. However the successful bidder has to see the site and may decide other ways of shaft deepening if they feel so. The furnishing and equipping includes installation of ore or waste rock dumping facility (Grizzly and rock breaker) below an Ore Pass at (-) 180ML and Ore crushing system including a series belt conveyors to transport crushed Ore or Waste Rock to the Production Shaft Area in separate Surge Bins as when required separately for further hoisting to Surface at different dumping points for Ore and Waste Rock. This Shaft will fulfill the requirement of hoisting of Ore or Waste rock and ventilation.

Presently spillage handling of hoisting system is done from BGML shaft from (-) 80ML. The successful bidder has to provide winder free of cost for spillage hoisting through BGML shaft one shift in a week.

Detailed scope of work of deepening of Production Shaft at Khetri Mine is given below:

- 1. Installation of winder (at 0ML) at BGML shaft for lowering man and material below 0ML and for hoisting waste rock generated below 0 ML in the course of Production Shaft Sinking and any other excavations with complete system including modification of foundation if required, sheave pulley, winding rope, all electrical instruments, skip/ bucket for waste rock hoisting up to 0ML and integrated with existing unloading arrangement at 0ML as per DGMS standard.
- 2. Excavation from (-) 106 ML of (4.0 m x 3.0 m) 20 m horizontal drive from BGML Shaft to production shaft location and 53m Horizontal drive for approach to the winder chamber location as shown in attached drawing which includes:
 - i. Scaling and proper dressing of roof.

- ii. Laying of 60 lbs/yd track.
- iii. Rock bolting (1.8m length) in grid pattern of 1.5mx1.5m.
- iv. Installing 4" air GI flanged pipe and 2"water GI flanged pipe with valves and intermittent tapping.
- v. 300mm deep and wide RCC drain.
- 3. Excavations for sinking winder chamber, pulley raise, rope raise etc. as per design at (-) 106 mRL.
- 4. Ventilation while deepening the Shaft:

The BGML shaft from 0ML to (-) 120ML will work as intake which will be coursed down while deepening the Shaft. The return will be through suitable diameter ducting pipe and discharged into a drive that will be further connected by a raise and the raise through with the Production shaft which is the main return of the mine. For this a drive of 2.5mx2.5m will be developed at (-) 106 ML for 20m towards south from the location of the Production Shaft at (-) 106 ML. A vertical raise of 2.5 mx2.5 m is to be excavated from (-) 106 ML to (-) 60 ML i.e. 46 m. At (-) 60 ML from the raise top a drive of 2.5mx2.5m is to be driven and holed through in the existing Production Shaft at (-) 64.9 ML. Proper care has to be taken to control the damage to the existing shaft holing point and necessary concreting has to be carried out after holing. Ventilation arrangements at 0ML including ventilation fan, ducting, electrical items etc to force air down the BGML shaft and in the sinking shaft up to (-) 226ML.

- 5. Preparation of winder foundation, installation of sinking winder, pulley, loading/unloading arrangement including all electrical as per approved design at (-) 106 mRL.
- 6. Deepening of 6.1m dia. Production Shaft:

It is to be informed that the last contract awarded for Production Shaft deepening could not get the job going due to loose ground encountered while approaching from (-) 120ML.

The present design suggested is after a lot of thought process going in way to further deepening is elaborated below. However the successful bidder is free to select any other alternatives to deepen the Production Shaft further taking due precaution of the loose ground.

7. Sinking of 6.1 m dia shaft from (-) 106 mRL to (-) 226 mRL:

- i. The muck generated during excavation of the shaft shall be hoisted through the sinking bucket and emptied in bucket at (-) 106ML and hauled through the drive at (-) 106 ML to BGML Shaft for hoisting to 0 ML. The muck will be further trammed through a distance of about 900m and will be hoisted through a waste pass up to 180 ML and dumped in void stopes at this level.
- ii. Patches of loose ground may be encountered during development of drives and cross cuts etc. which needs to be well supported/consolidated by the contractor. RCC of suitable thickness along with extra excavation for RCC, chemical/cement for ground consolidation and cable bolting may be required which shall be paid separately to contractor and shall be quoted in schedule V.
- iii. The area surrounding the bad/loose ground needs to be consolidated before going for sinking and lining to finished dia. This shall be the responsibility of the contractor to device methodology hire expertise if required for consolidation, support and sinking through the bad ground.
- iv. Pumping at (-) 120 ML: The water quantity as per present condition to be handled per day at this level is about 150 cu. M at a temperature of 40 deg C. The contractor should make his own arrangements following all safety measures for handling the seepage water during the course of shaft sinking to any quantity.
- v. Concreting of shaft: Providing, transmitting, placing of RCC 300mm thickness of M-25 grade at fine ore bin, collars below (-) 180 mRL including providing, fixing and removal of steel shuttering plates, staging, centering, cutting, bending, binding, fixing, welding including carriage of steel reinforcement, vibrating of concrete, fixing of inset plates and dowel bars
- vi. Providing, transmitting, placing of 300 mm PCC of M-25 grade throughout the shaft to obtain 5.5 m finished dia including providing, fixing, and removal of steel shattering plates, staging, centering vibrating of concrete, fixing of insert plates and dowel bars.
- vii. The Shaft linings should be anchored deep into the hard rock by rock bolts or cable bolts depending upon the strata condition.
- 8. From (-) 106 ML, a raise has to be taken up to (-) 95ML and then a rope raise has to be made from the winder chamber at an inclination to connect to the vertical raise. Thereby a natural plug of 9 m thickness will be formed between bottom of the existing Production Shaft and top of the Vertical Raise. As the finished dia of the shaft is 5.5 m, the remaining portion of the 9m natural parting and the stripping of the pillar formed due to vertical raise and the rope raise may be excavated to the

- finished dia by raising from 95 ML and holing to (-) 86 ML and further stripping it to the required dia along with concreting and lining.
- 9. Horizontal development at (-) 152 ML size 5.5m x 3.0m and other excavation for surge bin.
- 10. Horizontal development of size 5.5mx3.0m between production shaft and surge bin for belt level conveyor at (-) 180 ML including other excavations.
- 11. Excavation of shaft inset 5.5m x 3m at (-) 180 ML.
- 12. Excavation for Surge Bins, measuring pocket and loading station as per approved drawing. Concreting required for lining, collaring etc. required as per approved drawing will be the responsibility of the successful bidder.
- 13. Integrating with existing system including all arrangements in the existing production shaft.
- 14. Design, Supply, procurement, Lowering, Erection and commissioning, installation of winding facilities, all electrical items, fittings and tools at Production Shaft:
 - i. Skips of existing specifications (2 Nos.)
 - ii. Tail ropes for skips for operation from pit bottom to Surface bin.
 - iii. New winding ropes for entire depth of shaft.
 - iv. New Guide ropes for entire depth of shaft.
 - v. Existing guide rope tension arrangement is required to be replaced at its new location as per approved drawing.
 - vi. The existing service winder in the Production Shaft known as Cuba winder will also be extended up to the loading point of the skip below (-) 180 ML involving change in the motor and sheave wheel to cater to the extended depth.
 - vii. Swivel type suspension gears with complete attachments for skips.
 - viii. Removal of existing steel structures in the shaft below 0 ML.
 - ix. Reciprocating feeder below Surge Bins to feed ore to the belt conveyor.
 - x. Measuring hoppers (2 nos.) at loading point including Horizontal and Vertical trap door or any other system/ design required as per each of operation and maintenance and approved by HCL.
 - xi. Lowering and installation of spillage hopper along with chute and chute operating mechanism.
- 15. The facilities for ventilation, scaffolding, hoisting arrangement etc. during the construction of the shaft shall be arranged by the contractor.

All other activities like deepening of service shaft and other related activities will start only after deepening of Production shaft up to (-) 138 mRL. However, Engineer in

Charge, HCL can allow the successful bidder to start other activities considering the ground conditions at production shaft.

1.3.2.2 <u>Service Shaft Deepening</u>: Deepening of Service Shaft with complete lining, equipping, design, engineering, fabrication, manufacturing, supply, loading, unloading, storage, erection, testing, commissioning, integration with the existing system, carryout of performance guarantee tests and maintenance for 18 months (warranty period) for man winding system and equipment including electrical instruments, instrumentation and other utilities, structural and civil foundation after commissioning.

The location of the service shaft to further deepen has been reached at (-) 60 mRL by an inclined winze from "0"mRL.

The service shaft will be sunk from (-) 70ML to (-) 196ML and from (-) 18.42 ML i.e, bottom of the existing shaft to (-) 38ML, i.e. the top of the sheave wheel raise that is already excavated. The rope raise for the sinking winder is also excavated along with the winder chamber. After holing between (-) 18.42 ML to (-) 38 ML, the shaft has to be widened to its full width from (-) 38 ML to (-) 60 ML and RCC lined. Existing bottom of the shaft is at (-) 18.42 ML and filled with debris and other material, this needs to be cleaned by the contractor before removing the plug. Winder installation at (-) 60ML with all electrical and safety devices will be contractor's responsibility. Sinking of service shaft from (-) 60ML to (-) 70 ML has been completed. The service shaft will be furnished and equipped from 0 ML to (-) 196 ML and will be integrated with the existing System. However, the winding ropes will be fixed from the surface. This Shaft will fulfill the requirement of lowering and hoisting of men and material and ventilation.

Detailed scope of work for Deepening of Service Shaft at Khetri Mine is given below:

- 1. Ventilation arrangements at 0ML including ventilation fan, ducting, electrical items etc to ventilate up to (-) 60ML and below.
- 2. The sinking winder at (-) 60 mRL is being installed. Loading/unloading arrangement along with all other left over installation work required for sinking operation shall be the responsibility of the successful bidder.
- 3. Sinking of service shaft 6.70 m x 5.53 m from approx (-) 70 ML to (-) 196ML as per approved drawing:
 - i. RCC of Service Shaft: Providing, transmitting, placing of RCC of 300mm thickness of M-25 and concreting of 300 mm thickness throughout the shaft including providing, fixing and removal of steel shuttering plates, staging, centering, cutting, bending, binding, fixing, welding including carriage of steel reinforcement, vibrating of concrete, fixing of inset plates and dowel bars to obtain 6.11 m x 4.93 finished size.

- ii. 50m Shaft inset of size 5.5 m x 3.0 m at (-) 60 ML, (-) 120 ML and (-) 180 ML including laying of 60 lbs/yd track line with diamond crossing at the inset as per approved drawing. Inset of 30m length is already developed at (-) 60 ML. Excavation of brow at (-) 60 ML, (-) 120 ML and (-) 180 ML and keps and shaft bye pass of 3mx3m at (-) 120 ML and (-) 180 ML.
- iii. The insets and brow must have proper concrete lining in all three sides (Top and two sides) to give a smooth surface. The size of brow shall be as per the existing brow in upper levels of the shaft and it should be suitable for lowering 12m of rail.
- iv. White washing and lighting at all inset.
- v. Providing, transmitting, and placing of RCC at shaft insets, brow, keps and any other areas as per design requirement.
- vi. Excavation for sump at (-) 180 ML.

 As it's a deepening of the existing shaft, the same specifications of the existing shaft are to be continued.
- 4. Design, procure, Supply, Fabrication, Lowering, Erection and installation, steel structure of various size and sections in the shaft fittings and tools including all electrical items at Service Shaft and any other structures required in the shaft as per approved drawing:
 - i. Buntons to be inserted by making pockets, rigid guides for cage:
 - a. Rigid guides Rail Section of 60 lbs/yd for the cage.
 - b. Buntons at 3 m intervals for supporting the rigid guide system in an effective manner. The buntons to be of same type used presently.
 - c. Effective arrangement of fixing the rigid guides with the buntons.
 - ii. New Winding ropes for cage.
 - iii. Double deck cages with cage shoes as per existing cage design.
 - iv. Ladder way from 0 ML to (-) 196 ML including ladder, perforated sollar, wire mesh for separating the ladder way compartment as per regulation under MMR-1961 and approved design.
 - v. 12 inch diameter Pipe lines (2 lines) for compressed air and 8 inch (2 lines) diameter for dewatering and 4 inch diameter pipe line (1 no) for drinking water,
 - vi. Cables for power supply, signals, telephone and controls etc. and support for them as per approved design.
 - vii. Furnishing of shaft insets including structural construction.
 - viii. Pit bottom buffer shall be at the bottom of the shaft as per DGMS circular and approved drawing.
 - ix. Pumping arrangement from bottom of the shaft up to (-) 180ML sump including pump, fittings etc.
 - x. Sliding gates at all insets with suitable interlocks.

- xi. Signaling panels on all insets.
- xii. Telecommunication arrangement with banks man cabin at all insets.
- xiii. Fences, covers gates, protective roofing etc. at all insets to ensure safe workings.
- xiv. Ladder and platform arrangements in each level for men to come down from the upper deck of the cage to the level.
- 5. The service shaft 6.70 m x 5.53 m will be sunk from (-) 18.42 ML to (-) 38ML. After holing between (-) 18.42 ML to (-) 38 ML, the shaft has to be widened to its full width from (-) 38 ML to (-) 60 ML and RCC lined from (-) 18.42 ML to (-) 60 ML. Existing bottom of the shaft is at (-) 18.42 ML and filled with debris and other material, this needs to be cleaned by the contractor before removing the plug.
- 6. Integrating with existing system including RCC, lining, fixing of buntons, fixing of rail guides fixing of compressed air lining and other pipe lines ladder way arrangements as per point no 5.
- 7. Water garlands shall be provided at 2 m above all inset openings and below all areas in the shaft where there is seepage of water with a proper drain out pipe to the next garland or the next level.
- 8. The contractor should make his own arrangements for handling of any water seepage that may encounter during sinking process to any extent.
- 9. The shaft will be sunk through competent ground. However loose/incompetent strata may be encountered in patches which have to be tackled/ stabilized by the contractor.
- 10. The muck generated during excavation of the shaft shall be hauled through an incline from (-) 60 ML to 0 ML. The muck will be further trammed through a distance of about 350 m and will be hoisted through a waste pass up to 180 ML and dumped in void stopes at this level. Void stopes are available in 1.5 km radius. However, the dumping arrangement in the void stope at 180ML shall be prepared by the contractor at his own cost.
- 11. The water generated during shaft sinking operation shall be coursed to the sump at 0 ML.
- 12. All the facilities for ventilation, scaffolding, hoisting arrangement etc. during the construction of the shaft shall be arranged by the contractor.
- 13. Supply of all the materials, items, equipments and anything required to complete the shaft furnishing work shall be arranged by the contractor.

14. In case of power failure or problem in winder alternate supply of power and hoisting the men from the sinking pit bottom to be kept as stand by.

However, deepening of service shaft and other related activities will start only after deepening of Production shaft up to (-) 138 mRL.

1.3.2.3 **Auxiliary Shaft for Spillage Cleaning:**

Detailed scope of work of Auxiliary Shaft for Spillage Cleaning at Khetri Mine is given below:

- 1. Horizontal development at (-) 180 ML to approach at auxiliary shaft location.
- 2. Excavation of winder chamber, vertical raise, rope raise at (-) 180ML,
- 3. Preparation of winder foundation, installation of winder, sheave pulley, winding rope, loading/unloading arrangement including all electrical as per approved drawing at (-) 180 mRL.
- 4. Winzing of 3.4 m dia vertical shaft from (-)180ML to (-)226ML:
 - i. The muck generated during excavation of the shaft shall be hoisted through bucket and hoisted to (-) 180ML and hauled through the drive at (-) 180 ML and hoisted to 0ML. The muck will be further trammed at 0ML and hoisted through a waste pass up to 180 ML and dumped in void stopes at this level.
 - ii. The water generated during shaft sinking operation shall be coursed to the sump.
 - iii. The facilities for ventilation, scaffolding, hoisting arrangement etc. during the construction of the shaft shall be arranged by the contractor.
- 5. Connection drive (3.5 m x 3.0 m) at (-) 226 ML between production shaft and auxiliary shaft.
- 6. Design, Supply, procurement, Lowering, Erection and commissioning of Spillage handling system at Shaft Bottom including receiving hopper, chute, chute operating mechanism.
- 7. Dismantling of BGML Shaft winder at 0 ML and installation at (-) 180 ML for spillage reclamation.
- 8. Ventilation arrangement at (-) 226 ML by vertical raise from (-) 226 ML to (-) 210 ML and connecting it with production shaft by horizontal dev above spillage hopper.

1.3.2.4 Ore Hoisting System:

Detailed scope of work of Ore Hoisting System at Khetri Mine is given below:

The ore from ore pass will be fed to Ore Bin of 800 MT capacity by a vibratory feeder of 500 tons per hour capacity. This ore shall be passed through a Ore Bin size of 8m x 8m with grizzly opening of 800mm x 800mm along with two numbers of rock breakers installed at (-)180 ML. The ore from ore bin shall be fed to disc screen by a vibratory/ reciprocating feeder installed below ore bin. The fine ore shall pass through the disc screen and coarser ore shall be passed to the crusher. Both the discharge of crusher and disc screen shall be collected by discharge chutes to a belt conveyor at (-) 205 ML. The ore then be transferred to main inclined belts from (-) 205 ML to production shaft. The ore will be collected in a fine ore bin of 700 MT capacity near production shaft at (-) 152 ML. From fine ore bin the ore will be transferred to measuring hopper through a belt conveyor for loading skips.

One drive will be developed between crusher chamber and belt conveyor drive to facilitate second out let and ventilation of crusher house.

One fine waste bin shall be developed adjacent to fine ore bin near production shaft. It will be utilized for waste rock handling through production shaft. Once in a week the production shaft shall be devoted for hoisting and disposal of waste rock.

The purpose of the vibratory feeder below the Ore pass at (-) 180ML grizzly is to stop the free flow of Ore to the Ore Bin when waste rock will be dumped in the grizzly. And the waste rock via disc screen, crusher will flow through the same belt to the waste fine bin near the Production Shaft. Arrangement shall be made at surface for separate collection of waste rock to feed a surface waste bin from where it will be collected by truck for further disposal to a distance of around 1Km.

1.3.2.4.1 Excavation for Ore Pass System

- 1. Excavation of Ore Pass for transfer of ore from various levels from 180ML include:
 - i. Development of approach drives at (-) 180 ML and (-) 120 ML to approach new ore pass location from service winze.
 - ii. Deepening/Raising of a winze from (-) 80 RL to (-) 120 RL, presently used for approach to (-) 60 RL.
 - iii. Drop raising from (-) 180 RL to (-) 120 RL.
 - iv. An inclined raise to connect two raises i.e., one from 180 RL to 0 RL and other from 0 RL to (-) 180 RL.
 - v. Dismantling of structures from 0 ML to (-) 80 ML winze.

The winze from 0 ML to (-) 80 ML will be handed over for further deepening only after 5 years.

However the successful bidder can develop the raise from (-)120 to (-)180 by drop raising during this period.

The dismantling of structures in winze from 0 ML to (-)80 ML shall be completed before connecting it with bottom developed raise through inclined raise.

The detailed activity wise schedule to be submitted during mobilization period must be accordingly prepared.

However, development of approach drive and other related activities will start only after deepening of Production shaft up to (-) 138 mRL.

1.3.2.4.2 Excavation of Waste Pass:

This will be done by drop raising from 0ML to (-) 60ML, (-) 60ML to (-) 120ML and from (-) 120ML to (-) 180ML. The raises will be hole through in a drive at (-) 180ML. Finger raises at 60 deg. inclination and 10 to 15 m away from the vertical drop raise would be excavated at (-) 60ML, (-) 120ML for dumping waste rock from their levels and grizzly to be fixed both at 0ML, (-) 60ML & (-) 120ML.

At (-) 180ML a chute with compressed air operation for filling the GB cars to be provided.

Supply, lowering, fabrication and fixing of a camel back at the Ore Bin grizzly at (-) 180ML for dumping the waste rock.

However, excavation of waste pass and other related activities will start only after deepening of Production shaft up to (-) 138 mRL.

1.3.2.4.3 Excavation for Crushing, ore handling, conveying and loading to Production Shaft skips etc.

- 1. Excavation of approach drive from the service winze to the crusher chamber at (-) 205 ML.
- 2. Excavation, foundation and fixing of two nos of rock breaker including roof stripping, grizzly foundation. Supply, lower, fabrication and fixing of grizzly girders, beams and fixing of pre cast grizzly. Excavation for fixing the vibratory feeder and installation of the feeder below the ore pass.
- 3. Excavation of crusher chamber, Ore bin of 800MT capacity including discharge chute and other required excavation below (-) 180ML as per schematic drawing attached. Preparation of crusher foundation and installation of crusher, disc screen etc and supporting of crusher chamber excavation.
- 4. Excavation for belt conveyor drive of 3.5 m x 3.0 m (horizontal) below crusher chamber at (-) 205 ML between crusher discharge and main conveyor belt.

- 5. Excavation for belt conveyor drive of 3.5 m x 3.0 m at an inclination of 7.5⁰ between crusher chamber and transfer point at (-) 180 ML with manholes as per MMR 1961.
- 6. Excavation for belt conveyor drive of 3.5 m x 3.0 m at an inclination of 5⁰ between transfer point at (-) 180 ML and production shaft at (-) 152 ML with manholes as per MMR 1961.
- 7. Excavation for transfer points for different belt conveyors.
- 8. Excavation of fine ore bin and fine waste bin of 700 MT capacity each near production shaft with RCC lining.
- 9. Excavation of horizontal drive of 3.5 m X 3 m at (-) 180 ML between Production Shaft, crusher chamber and service shaft which includes:
 - i. Scaling and proper dressing of roof.
 - ii. Laying of 60 lbs/yd track.
 - iii. Rock bolting (1.8m) in grid pattern 1.5mx1.5m.
 - iv. Supply, lower and installing 4" air GI flanged pipe and 2"water GI flanged pipe with valves and intermittent tapping.
 - v. 300mm deep and wide RCC drain.
- 10. Excavation and supporting of Electric Substations including installation of substation and foundation, trenches etc as per the drawing.
- 11. Patches of loose ground may be encountered during development of drives and cross cuts etc. which needs to be well supported / consolidated by the contractor. RCC of suitable thickness along with extra excavation for RCC, chemical/cement for ground consolidation and cable bolting may be required which shall be paid separately to contractor and shall be quoted in schedule V.

However, excavation for Crushing, ore handling, conveying and loading to Production Shaft skips etc will start only after deepening of Production shaft up to (-) 138 mRL.

1.3.2.4.4 Design and Erection of Crushing and Hoisting System.

1. Design, Supply, procurement, Lowering, foundation, concreting, Erection and commissioning of crusher and ore handling system and EoT crane with motors, cables, switch gear, guards and other components including laying of cables from substation as per approved drawing:

- a. Vibratory feeder or any other reciprocating feeder of 500 tons per hour capacity below ore pass to feed grizzly/Ore Bin at (-) 180 ML.
- b. 2 nos of rock breaker and grizzly over the ore bin size 8m x8m with grizzly opening (800mm x 800mm) at (-) 180 ML.
- c. Vibratory feeder of 500 tons per hour capacity below Ore bin to feed crusher.
- d. Jaw crusher of 500 tons per hour complete with drive mechanism.
- e. Disc screen complete with drive mechanism.
- f. Vibratory feeders or reciprocating feeder (2 nos) one below fine ore bin and one below waste bin near production shaft at (-) 180 ML.
- g. EoT Crane of 30 tonne capacity for crusher chamber and a small crane for installation/repairing of feeder below Ore bin.
- h. Belt conveyor system of 500 tph capacity at underground to transfer crushed ore from crusher chamber to the surge bin:
 - 1. Fire resistant conveyor of 1000 mm width.
 - 2. Complete set of idler with mounting frame suitable for 1000 mm conveyor
 - 3. Horizontal rollers for 1000 mm conveyor
 - 4. Drums/pulley for the system

The belt conveyor system comprises of the following series of belts.

- I. Horizontal belt conveyor of length 20 m below crusher at (-) 205 ML.
- II. Inclined Belt conveyor 7.5° of length 200 m from crusher house at (-) 205 ML to transfer point at (-) 180 ML.
- III. Inclined Belt conveyor 5⁰ of length 340 m from transfer point at
 (-) 180 ML to production shaft at (-) 152 ML.
- IV. Horizontal belt conveyor with folding arrangement of length 10m at (-) 152 ML to facilitate discharge in to fine ore bin.
- V. Horizontal belt conveyor of length 25m below surge bin at (-) 180 ML.
- VI. Horizontal belt conveyor of length 15m below waste bin at (-) 180 ML to discharge muck into main loading belt at (-)180 ML.

The above belt conveyors shall be provided with interlocking arrangement, signaling system as per requirement and design.

2. The muck generated during excavation shall be hoisted to 0 ML through service winze and through service shaft. The muck will be further dumped into waste pass and shall be hoisted to 180 ML and dumped in void stopes at this level.

- 3. The facilities for ventilation, pumping and hoisting arrangement etc. during the excavation shall be arranged by the contractor.
- 4. Supply of all the materials, items, equipments and anything required in completing the excavation of ore handling and crushing system work shall include in the scope of work.
- 5. The hoisting system should be automatic with belt operation below fine ore bin/waste bin up to loading of skips and hoisting.

1.3.2.5 SERVICE WINZE:

Detailed scope of work of service winze at Khetri Mine is given below:

- 1. Equipping of service winze including ladder way compartment, ladders, platforms at 6m interval, wire mesh for isolating ladder way compartment etc from 0 ML to (-) 244 ML.
- 2. Excavation of bin of 50T capacity in service winze below (-) 180 ML and installation of loading arrangement.
- 3. Excavation of approach drive from service winze for pumping station at (-) 235 ML.
- 4. Installation of 18" I section girders along with 60 lbs/yd rails in grizzly pattern to securely cover the service winze at (-) 244 ML.
- 5. Pumping of water in service winze to keep the water level below the covering at (-) 244 ML shall be under the scope of the successful bidder till the completion of the project.
- 6. Pumping of water from (-) 235ML will discharge into main sump at (-) 180ML from where the water will be pumped up to 0ML.
- 1.3.2.6 <u>Allied Excavation</u>: As and when required underground excavations for various purposes paid at the rate of per cubic metre as per schedule V under head 'GROUND SUPPORT AND MISCELLENIOUS ITEMS AS AND WHEN REQUIRED' shall be within the scope work of the Successful Bidder.
- 1.3.2.7 <u>Allied Jobs</u>: The allied jobs associated with deepening of Shafts, installation of sinking winder, dumping point as a whole along with dismantling of the winders and chute etc. are also to be within the scope work of the Successful Bidder as per the requirement.

1.3.3 Other Responsibilities:

1) All equipment, manpower and consumables required for executing the work except as provided in list of free supplies, shall be procured/arranged by the Successful Bidder at own cost. The Successful Bidder shall arrange for drilling, blasting, mucking and hauling. Maintenance and procurement of all other equipment essential for their operation, maintenance and procurement of drilling accessories, spare parts and all other consumables shall be responsibility of Successful

- Bidder only. Cap lamps along with charger, racks and safety wears will also be the responsibility of the Successful Bidder.
- 2) The Successful Bidder shall submit list of manpower separately for Service Shaft Deepening, Production Shaft Deepening and Ore Hoisting System separately including other activities before start of the work to the Engineer In-Charge. The Engineer In-Charge shall allow for the work upon his satisfaction to the sufficiency of the manpower.
- 3) Procurement of all machineries, transportation of the machineries at site, materials, tools and tackles etc. required for maintenance of equipment will be arranged by the Successful Bidder at his own cost. Also any other or additional equipment, tools or facilities required for execution of the work under contract will have to be arranged by the Successful Bidder at his own cost. The equipment like Crusher, Feeders, Belt conveyors and Rock Breaker should be from Original Equipment Manufacturer (OEM) or from authorized agency who should have Service Centre in India before 2015-16. Year of manufacture of equipment proposed to be deployed for this work should not be more than 12 months from the date of supply at the site and shall be in unused condition. The possession/ arrangement are to be specified by the bidder by producing supporting documents.
- 4) Maintenance track for waste dumping shall be the responsibility of the Successful Bidder including repair & maintenance of dumping ramp at 180 ML.
- 5) Successful Bidder has to fulfill the entire statutory requirement and has to carry out the work Successful Bidder as stipulated under various rules framed by DGMS and any special conditions imposed by DGMS for safety of the work persons, work place and equipments used.
- 6) Work shop facility required at each main level will have to be created by the Successful Bidder and the extra excavation required for this purpose will have to be done by the contractor.
- 7) **Ventilation**: It shall be Successful Bidder's responsibility to keep his working area well ventilated to ensure an adequate supply of air as per statutory standards applicable and make his own arrangement for procurement and maintenance of equipment's like ducts, auxiliary fans or suitable mechanical appliances, electric cables, starters (OCB), switches etc for proper coursing of air.
 - Successful Bidder shall arrange for regular inspection of all the areas to check proper ventilation at different workings as per statutory standards and submit the report to the Engineer-in-charge. Conducting periodical statutory ventilation survey in the area shall also be the responsibility of the Successful Bidder. The Successful Bidder shall maintain records of such survey and get countersign by the Mines Manager.
- 8) The Successful Bidder at his own cost should arrange all the essential inputs required for operation/maintenance of Equipments except mention in free supply by HCL.
- 9) The Successful Bidder shall ensure safe working of Men & Machinery and the company shall in no way be held responsible for any damage/loss/accident etc. of any type and/or reason including blasting operations.

- 10) Successful Bidder shall be liable to pay for any damage caused to the HCL's Equipment etc. due to negligence of his employees. HCL reserves the right to deduct amount of such damages caused by the Successful Bidder or his employees to HCL's equipment from Security Deposit lying with HCL at that time.
- 11) Working hours shall be on 3 shifts of 8 hours per day, 6 days a week as followed at Khetri Copper Mine. Total working days per month shall be the days in a month except Sunday and paid holiday.
- 12) Successful Bidder should comply with all the statutory provisions as per MMR 1961 during the period of work and maintain records under the said regulation.
- 13) Successful Bidder shall not be entitled to any additional cost on account of shifting of equipment from one place to another place.
- 14) The Successful Bidder should employ only skilled, qualified, experienced and authorized manpower for operation and maintenance of Equipment. In case of newly appointed manpower, they should undergo Vocational Training, as per statute for working in mines. At least two numbers of rescue trained persons shall be deployed by the successful bidder and present during the contract period.
- 15) In case development is required of different cross section that the size mentioned in this schedule of quantities, the rate will be calculated from the nearest sizes of working available in the schedule of rates and from Allied Excavation in relation to the cubic metre in per metre advance. Out of which, minimum rate derived shall be the rate of new introduced size of the development.
- 16) At blind end sinking like in production shaft, service shaft, a second source of power like DG set and a standby hoist to be kept for emergency.

Operational Features: The Successful Bidder's Scope of Work shall also include all the obligations covered in various parts of "Instructions to Bidders", "General Conditions", "Special Conditions" and will interalia include the following:

- Design, construction, fabrication, supply, transportation to site, receipt at site including handling & storage of all mining, civil, structural, mechanical, electrical, pollution control, equipments, water supply, sewage disposal, drainage etc. including other items will be responsibility of the selected bidder. The Scope of Work shall also include bringing in and/ or procurement and/ or deployment of new equipment and/or machinery as well as replacement of existing equipment/ fixtures as required. Financing of the replacement equipment/ fixtures shall also be the responsibility of the Successful Bidder.
- Installation, commissioning, maintenance and operation of all equipment and/or machinery shall be the responsibility of the bidder notwithstanding whether deployed by the Bidder or by HCL. For all the immovable and movable equipment and/or machinery, the Successful Bidder shall arrange supply of spare parts for equipment.

1.4 SPECIAL CONDITIONS OF THE CONTRACT:

- 1.4.1 The successful bidder shall ensure safe working of man & machinery and HCL/KCC shall in no way be held responsible for any damage/loss/accident etc of any type and/or reason including blasting operations.
- 1.4.2 The successful bidder will be liable for any damage caused to the HCL's equipment/property etc. due to negligence of his employees.
- 1.4.3 The successful bidder shall not be entitled to any additional cost on account of shifting of equipment from one place to another place.
- 1.4.4 The successful bidder shall ensure reliability/availability of all equipments during the contract period. In case of any break down of the equipment, the same should be intimated to the Engineer-in-Charge or his representative immediately and also immediate action is to be taken to rectify/replace the equipment to achieve the monthly target.
- 1.4.5 The successful bidder should employ only skilled and authorized manpower for operation and maintenance of the equipment In case of new appointment of manpower, they should undergo vocational training as per statute for working in mines at KCC Vocational training centre and must undergo Initial Medical Examination and PME.
- 1.4.6 For carrying out work on Sundays/holidays, the successful bidder will approach the Engineer-in-Charge or his representatives at least two days in advance and obtain permission in writing.

1.5 **PRE-QUALIFICATION**

- 1.5.1 Scope of Bid/Offer: HCL wishes to select experienced and capable bidder for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan
- 1.5.2 Integrity Pact: Bidders shall execute an Integrity Pact Agreement with HCL in the format annexed as **Appendix VA** as a pre-qualification to the submission of their bids in accordance with the tender. The duly executed Integrity Pact in original on non-judicial stamp paper of appropriate value (Rs. 50/-) shall have to be submitted to HCL along with Techno-commercial bid.
- 1.5.3 Eligibility of Bidders: The bidder should have to fulfill the following qualification criterion:

1.5.3.1 Financial Eligibility:

(i) The average annual financial turnover of the bidder during the last three (3) consecutive audited financial years ending 31.3.2017, shall not be less than Rs 50 Crore (Rupees Fifty Crore) as per the audited annual accounts. Documentary evidence for the above shall be annexed to the Offer in the form of a certificate from Chartered Accountant.

In case of a Consortium, the Lead member of the consortium must have minimum 75% of the Turnover specified in Eligibility Criteria i.e. Rs 37.5 crore (Rupees Thirty Seven Crore Fifty Lakh) or more.

The turnover shall be calculated as per the following formula: Gross Turnover – Excise duty

(ii) The Bidder (in case of consortium, the consortium) shall have positive net worth as per their latest audited financial statement. Relevant documentary evidence including copies of Annual Report, containing Profit & Loss Statement and Balance Sheets for immediate preceding three (3) consecutive accounting years ending 31.3.2017 or the last date on which the accounting year ends, shall be furnished together with the Bid. A Bidder (in case of consortium, the consortium) not having positive net worth as per their latest audited financial statement is ineligible to participate in the tender.

The net worth shall be calculated as per following formula: Share Capital + Free Reserves – Deferred Revenue Expenditure (If any)

The Bidder shall have to submit copies of relevant documents/evidences, duly certified by a Chartered Accountant as indicated above, in support of their financial eligibility along with their Techno-commercial bid.

1.5.3.2 Technical Eligibility:

For demonstrating technical credibility/experience, the Applicant shall have successfully completed all the works mentioned below during the last seven (7) years immediately preceding 31-03-2017:

- 1.5.3.2.1 Successfully executed at least two concrete lined vertical shaft of not less than 160 m in depth and having a cross-section area of not less than 28 m² in 3 years period each.
- 1.5.3.2.2 Should have designed, erected and commissioned at least one system for Ore Hoisting system comprising of sizing, crushing, conveying and ore loading arrangement with a designed capacity of 300 tonne /hour.
- 1.5.3.2.3 Should have completed 1000 m horizontal development in any year from any single work in any underground metal (non ferrous metal) mine.

- 1.5.3.3 The Bidder shall have to submit copies of all relevant documents/evidences in support of their technical eligibility, as indicated above, along with their Techno-commercial bid duly attested by the authorized signatory of the bidder.
- 1.6 The bidders shall enclose the following in their offer as per the forms prescribed in this tender:
 - a. Certificate(s) from the statutory auditors of the bidder as per **Appendix VI**, specifying the turnover of the bidder as per the audited annual accounts of the consecutive preceding three financial years from the tender submission date, and also specifying that the methodology adopted for calculating such Turnover conforms to the provisions of tender.
 - b. Certificate(s) from Company or client of the bidder, based on the client certificate and as per **Appendix VII** to be submitted, to showcase relevant experience in rock handling, development, production drilling in mine in the specified period, to fulfill the technical eligibility.
 - c. The bidders should submit a **Power of Attorney in non-judicial stamp paper, strictly** as per Appendix IVA, IVB & IVC duly notarized, authorizing the signatory of this tender to commit the bidder.
 - d. The following conditions shall be adhered to while submitting the tender:
 - In responding to the tender submissions, bidders should submit the required documentary evidence demonstrating their capabilities in accordance with the relevant applicable clauses of the tender.
 - 1.6.1 Individual bidders / Consortium are eligible to participate in tender. The definition of consortium is as given in Article 1, i.e. Definitions and Interpretation chapter of NIT of Section II.

 In case of a Foreign Listed Company, bidding as a Consortium Lead Member, it must have an Indian Company, registered under the Company's Act, as one of the Consortium Members.
 - No Foreign Listed Company will be allowed to bid as an individual.
 - 1.6.2 Any entity which has been barred by the Central/State government, or any entity controlled by it, from participating in any of the project and the bar subsists as on the date of the tender, would not be eligible to submit an offer. The bidder should submit an Affidavit declaring that no such bar has been implied by Central/ State government.
 - 1.6.3 A bidder should, in the last 3 (three) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority, a judicial pronouncement or arbitration award against the bidder. The bidder should submit a Affidavit declaring that no arbitration case is filed against them.
 - 1.6.4 The following conditions shall be adhered to while submitting the Tender:

- (a) Bidders should attach clearly marked and referenced continuation sheets in the event that the space provided in the prescribed forms is insufficient. Alternatively, bidders may format the prescribed forms making due provisions for incorporation of the requested information;
- (b) Information supplied by a Bidder;
- (c) In responding to the tender submissions, Bidders should demonstrate their capabilities in accordance with Clause 3.1 below.

1.6.5 Additional Requirements for a Consortium

In case the Bidder is a Consortium, it shall comply with the following additional requirements:

- (a) Number of members in a Consortium will be as per requirement of the Bidder;
- (b) Subject to provisions of sub-clause (a) above, the Application should contain the information required for each member of the Consortium;
- (c) Members of Consortium shall nominate the member who satisfies financial eligibility criteria as prescribed in the NIT, as the lead member (the "Lead Member") of the Consortium, who shall hold minimum 75% of the specified Turnover as specified in Clause 1.5.3.1 above and as per Article 1 of Definitions and Interpretations of Section II. The nomination(s) shall be supported by a Power of Attorney, as per Appendix IV B, duly signed by both members of the Consortium.
- (d) The Bid should include a brief description of the roles and responsibilities of individual members, particularly with reference to their financial and technical obligations;
- (e) An individual Bidder cannot at the same time be a member of a Consortium applying for pre-qualification. Further, a member of a particular Applicant Consortium cannot be a member of any other Applicant Consortium applying for pre-qualification;
- (f) Members of the Consortium shall enter into a binding Joint Bidding Agreement, substantially in the format specified at Appendix IV C (the "Joint Bidding Agreement" or "JBA"), for the purpose of submitting the Bid and execute the Project in case they have been selected as the successful Bidder. The JBA, to be submitted along with the Part-I Bid, shall, *inter alia*:
 - i. convey the intent to enter into the Agreement and subsequently perform all the obligations of the selected Bidder in terms of the Mine Expansion Agreement, in case the Project is awarded to the Consortium;
 - ii. clearly outline the proposed roles and responsibilities, if any, of each member;

- iii. include a statement to the effect that all members of the Consortium shall be liable jointly and severally for all obligations of the selected Bidder in relation to the Project in accordance with the Mine Development Agreement;
- iv. commit that its Members would fulfill the eligibility conditions as laid down in Clause 1.5.3; and
- (g) Except as provided under this NIT and the Bidding Documents, there shall not be any amendment to the JBA.
- (h) The permissible amendments to the JBA under the NIT and bidding documents shall be only with prior written consent of HCL.
- 1.6.6 Any entity which has been barred by the (Central/State government, or any entity controlled by it) from participating in any of the project and the bar subsists as on the due date of bid submission, would not be eligible to submit its bid, either individually or as a member of a Consortium.
- 1.6.7 A Bidder including any Consortium member or Constituent should, in the last 3 (three) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority, a judicial pronouncement or arbitration award against the Applicant, Consortium member or Constituent, as the case may be, nor has been expelled from any project or contract by any public entity nor have had any contract terminated by any public entity for breach by such Bidder, Consortium member or Constituent. The bidder should confirm as desired in Appendix I.
- 1.6.8 The following conditions shall be adhered to while submitting the Bid:
 - (a) The Bidder should attach clearly marked and referenced continuation sheets in the event that the space provided in the prescribed forms is insufficient. Alternatively, Bidders may format the prescribed forms making due provisions for incorporation of the requested information;
 - (b) In case the Bidder is a Consortium, each member should substantially satisfy the pre-qualification requirements to the extent specified herein.
- 1.6.9 Change in composition of the Consortium
 - 1.6.9.1 Change in the composition of a Consortium will not be permitted by HCL after opening of Part-I bid and subsequently till the tenure of the contract.
- 1.7 Number of Tender/Offer and cost thereof

- 1.7.1 The bidders shall be responsible for all the costs associated with the preparation of their tenders and their participation in the bidding process. HCL will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the bidding process.
- 1.8 The Contract sets forth the detailed terms and conditions for the work, including the scope of the selected bidder's services and obligations.
- 1.9 The statements and explanations contained in this tender are intended to provide a better understanding to the bidders about the subject matter of this tender and should not be construed or interpreted as limiting in any way or manner the scope of services and obligations of the Contactor set forth in the Contract.
- 1.10 Any omissions, conflicts or contradictions in the bidding documents including this tender are to be noted, interpreted and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by HCL.
- 1.11 HCL shall receive bids pursuant to this tender in accordance with the terms set forth hereunder and other documents that may be provided by HCL pursuant to this tender, including any modification, alteration, amendment or clarification that may be issued by HCL from time to time (collectively the "**Bidding Documents**"), and all bids shall be prepared and submitted in accordance with the terms of the bidding documents within the due date of submission.

1.12 Brief description of Bidding Process

1.12.1 HCL has adopted a two-part process (collectively referred to as the "Bidding Process") for the selection of the bidder for award of the work. The first bid (the "Techno Commercial Stage") of the process involves the qualification of interested parties in accordance with the provisions of the pre-qualification criteria and the second bid is the price bid. Both the bids have to be submitted on the date of tender submission.

The second bid will be opened only for those bidders who have qualified techno-commercially in the first bid. In case it necessitates any change in the scope of work or change in the terms & conditions on the tender for some valid reasons, after opening of the tender, HCL at its sole discretion reserves the right to give an equal opportunity to the bidders to revise price bid (Part-II) of their offers, if they so desire, depending on the change in the scope of work/terms & conditions. At the bid stage, the aforesaid qualified bidders (hereinafter referred to as the "Bidders") are being called upon to witness price bid opening. The bid shall be valid for a period of not less than 180 (one hundred and eighty) days from the bid due date.

- 1.12.2 The bidding documents include the Contract as well as all the other appendices as annexed to this tender and all the aforesaid documents and any addenda issued subsequent to the issue of this tender, but before the bid due date, will be deemed to form part of the bidding documents.
- 1.12.3 The bidder is required to deposit, along with its bid, a bid security as per Clause 2.14. The bid shall be summarily rejected if it is not accompanied by the Bid Security.

- 1.12.4 **Site visit**: Site visit is mandatory before submission of bid. Bidders have to submit a certificate confirming to have visited the site, duly countersigned by HCL/KCC's Unit Head or his representative in the prescribed format as appendix IX C.
- 1.12.5 Any query or request for additional information concerning this tender shall be submitted by email to the officer designated at clause 2.6.4.

1.13 Schedule of Bidding Process

HCL shall endeavour to adhere to the schedule provided for under this clause. However, in case HCL in its sole discretion undertakes any modification in the schedule specified below, the same will be conveyed through HCL website only. Hence, bidders are requested to periodically visit HCL website for any notification.

Sl.	Event Description	Dates
1.	Issuance of tender	18.10.17 between 10.00 am to 5.00 pm
2.	Pre Bid Meeting	17.11.17 at 15:00 Hrs.
3.	Issue of Amendments, if any	To be published in HCL website
4.	Closing date of issuance of Tender	04.12.17
5.	Due date of bid submission	04.12.17 Up to 14:30 Hrs.
6.	Opening of Part-I bid	04.12.17 At 15:00 Hrs.
7.	Opening of Price Bid	To be intimated to the qualified bidders
8.	Issue of LOI / WO	To be intimated to the successful bidder

2. INSTRUCTIONS TO BIDDERS

a. **GENERAL**

2.1 Site visit and verification of information:

- 2.1.1 Bidders must visit the work site and ascertain for themselves the site conditions, condition of winders and its fittings (Ref Clause 1.3), location, surroundings, climate, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather data, applicable laws and regulations, and any other matter considered relevant by them before submission of bid.
- 2.1.2 For this purpose, bidders shall communicate to HCL via notice/e-mail indicating their intention to visit the site along with the intended date of visit and the details of their visiting representatives at least 3 (three) days before their intended visit.

HCL shall communicate its response to the interested bidders who are planning to visit the work site at the earliest approving the date of visit or may specify another date as it may consider suitable.

- 2.1.3 It shall be deemed that by submitting a bid, the bidder has complete understanding of the work and only after that the bidder has:
 - a) Made a complete and careful examination of the bidding documents;
 - b) Received all relevant information requested from HCL;
 - c) Satisfied itself about all matters, things and information
 - d) Acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the bidding documents or ignorance of any of the matters shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. by the bidders from HCL, or a ground for termination of the Contract;
 - e) Acknowledged that it does not have a Conflict of Interest; and
 - f) Agreed to be bound by the undertakings provided by it under and in terms hereof.
- 2.1.4 HCL shall not be liable for any omission, mistake or error on the part of the bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to tender, or the bidding process, including any error or mistake therein or in any information or data given by HCL.

2.2 Verification and Disqualification

- 2.2.1 HCL reserves the right to verify all statements, information and documents submitted by the bidder in response to the tender or the other bidding documents and the bidder shall, when so required by HCL, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification by HCL shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of HCL there under.
- 2.2.2 HCL reserves the right to reject any bid and appropriate the bid security if:
 - a. at any time, a material misrepresentation is made or uncovered, or
 - b. The bidder does not provide, within the time specified by HCL, the supplemental information sought by HCL for evaluation of the Bid.
 - c. No deviations shall be mentioned in the price bid or any part of the tender document, otherwise the offer will be summarily rejected.

Such misrepresentation/improper response shall lead to the disqualification of the bidder.

In case it is found during the evaluation or at any time before signing of the Contract or after its execution and during the period of subsistence thereof, that one or more of the pre-qualification conditions have not been met by the bidder or the bidder has made material misrepresentation or

has given any materially incorrect or false information, the bidder shall be disqualified forthwith if LOI has not been issued to such bidder, and if the selected bidder has already been issued the LOI or the selected bidder has entered into the Contract, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this tender, be liable to be terminated, by a communication in writing by HCL to the selected bidder, without HCL being liable in any manner whatsoever to the selected bidder. In such an event, HCL shall forfeit, invoke and appropriate the Bid Security, or the Performance Security and/or the payments made by the selected bidder as per the Contract, as the case may be, as damages, without prejudice to any other right or remedy that may be available to HCL under the bidding documents and/or the Contract, or otherwise.

2.2.3 The Contract to be executed by successful bidder as given in section II as part of the Bidding documents shall be deemed to be part of this tender.

2.3 Clarifications

- 2.3.1 HCL shall endeavour to respond to the questions raised or clarifications sought by the bidders. However, HCL reserves the right not to respond to any question or provide any clarification, and nothing in this clause shall be taken or read as compelling or requiring HCL to respond to any question or to provide any clarification.
- 2.3.2 HCL may, if deemed necessary by HCL, issue interpretations and clarifications to all bidders. All clarifications and interpretations issued by HCL shall be deemed to be part of the bidding documents. Verbal clarifications and information given by HCL or its employees or representatives shall not in any way or manner be binding on HCL.

2.4 Amendment of Tender

- 2.4.1 Before bid due date, HCL may, for any reason, whether at its own initiative or in response to clarifications requested by a bidder, modify the tender by the issuance of addendum.
- 2.4.2 Any addendum thus issued will be intimated to the bidders by uploading on HCL website only.
- 2.4.3 In order to afford the bidders a reasonable time for taking an addendum into account, or for any other reason, HCL may, extend the bid due date.

b. PREPARATION AND SUBMISSION OF BIDS

2.5 On line offers are invited through Enterprise Procurement System (EPS) of M/s. Mjunction Services Limited (MJ), who is the service provider to HCL, under two-part bid system. All vendors are requested to contact M/s. Mjunction Services Limited, Kolkata at the following address for registration and obtaining user id and password to access and quote for the tender enquiry on line.

The offers are to be submitted on line at URL https://eps.buyjunction. in of M/s. Mjunction Services Limited, Kolkata, who are our service provider for Enterprise Procurement System.

Registration Procedure:

- 1. Please visit the Link https://eps.buyjunction.in.
- 2. Click on Register button.
- 3. Put your Company PAN No.
- 4. Click on INTERESTED Button on behalf of respective organization. It would be HCL in your case.
- 5. Fill up the Form, click on the next button fill your preferred procurement category and click on submit button.
- 6. Download the pdf Form and take a printout of the same on your Organizational Letterhead.
- 7. Duly Sign & Stamp on each page of the form
- 8. Attach One (1) Photocopy of your Organization PAN Card
- 9. Scan and email the same to eps.customercare@mjunction.in or Fax us at 033 66106345.
- 10. Courier the hard copy to the below mentioned address
- 11. MJ New Office Address:

Godrej Waterside

Tower-I, 3rd floor, Plot No. 5,

Block-DP, Sector-V, Salt Lake City, Kolkata – 700091

NB: You do not require registering again for different tender enquiries of HCL. Registration on the website is free of cost.

MJ Contact Person:

Important 1: For Registration related issues, all tenderers are requested to contact M/s. Mjunction services limited, Kolkata, for free registration and obtaining User ID and Password. Please feel free to call at 033 66106426 (9.30 AM to 5.30 PM) or mail us at eps.customercare@mjunction.in for any assistance.

Important 2: For Bidding related issues, please call Mjunction on their Toll Free Helpline at 1800-419-20001 (9.30 AM to 5.30 PM). You can also use their Customer Complaint Handling Portal and log in your suggestions and complaints, if any, through this portal. You need to click on "Query" or "Complaint", which is available in the home page . Your issues will be resolved through the CCHP portal itself.

For Urgent Escalation on EPS please contact:

Mr. Indranil Banerjee / Ms. Sakshi Saxena Client Relationship Manager (CRM) Mjunction services ltd

Landphone: +91 33 66106015 (Direct) Landphone: +91 33 66106100 (Board)

Handphone: +8584008224 Facsimile: +91 33 66011719

Email: indranil.banerjee@mjuntion.in

For any further details on the tender, the interested parties may contact HCL office at (033)2283-2228.

NOTE:

- 1. All entries in the quotation should be entered at on-line submission form without any ambiguity and can be corrected by the vendor till the date and time of closing. The last modified quotation will be taken into consideration only.
- 2. Quotation cannot be accessed on-line after the DUE DATE.
- 3. Any order resulting from this enquiry shall be governed by the following terms and conditions in addition to those mentioned in order.
- 4. PRICE: Price Bid shall be submitted through Enterprise Procurement System through Internet. Price bid of Techno-commercially acceptable tenderers ONLY as assessed by HCL shall only be evaluated. The schedule and details of e-procurement event shall be communicated by HCL/Service Provider (Mjunction Services Ltd.) to the techno-commercially accepted bidders.

During the online Enterprise Procurement System, Price to be submitted in the Price Bid format Online. Rating of L1 bidder shall be done on lowest quoted rate basis.

The interested parties should go through Terms and Conditions of the tender before submitting their offer on-line.

The bidders should carry out mock submission of e-bid at Mjunction atleast 4 days before the bid submission date and screen shot of the same should be submitted in Techno Commercial bid documents.

5. The bidders who strictly fulfill the Pre-qualification criteria should only submit their offer on-line on EPS mode in two parts. The Part-I shall consist of "Qualification & Techno Commercial Bid" and Part-II shall be "Price Bid". The bidders, in proof of their fulfillment of Pre-qualification criteria, have to furnish the required documents off-line. The relevant documents along with the required EMD and a copy of tender document duly signed and stamped on each page in acceptance of all terms and conditions and relevant Annexures as mentioned in the Appendices, duly filled shall have to be sent in a sealed packet to Executive Director (Commercial), Hindustan Copper Limited, "Tamra Bhawan", 1, Ashutosh Choudhury Avenue, Kolkata – 700 019, super scribing tender enquiry no. The bidders must ensure that the above details and EMD are received by HCL before the due date of opening of bids on EPS.

Key features in Purchase Procedures:

- Use of On-Line Enterprise Procurement System for price bid.
- Vendors can access the evaluation statement on-line after the bid evaluation is over.
- Price evaluation will be on lowest quoted rate basis.
- Once the Enterprise procurement is closed, tenderers shall not be allowed to revise their price and/or withdraw their offer for any reason whatsoever.

WE REQUEST BIDDERS TO RESPOND TO THIS ENQUIRY WITHOUT FAIL. IN CASE BIDDERS ARE NOT IN A POSITION TO SUBMIT THEIR OFFER, BIDDERS ARE REQUESTED TO AT LEAST SEND REGRET LETTER AS AVAILABLE ON-LINE AT ENTERPRISE PROCUREMENT SYSTEM, IF NO RESPONSE IS RECEIVED; BIDDER'S NAME IS LIABLE TO BE DELETED FROM OUR MAILING LIST.

Format and Signing of Techno Commercial Bid (Part – I)

The bidder shall provide all the information sought under this tender. HCL will evaluate only those bids that are received in the prescribed formats and complete in all respects.

The bid shall be typed or written in indelible ink and signed by the authorized signatory of the bidder who shall also sign each page. The bid shall be submitted in hard bound form. In case of printed and published documents, only the cover shall be initialed. All the alterations, omissions, additions or any other amendments made to the bid shall be initialed by the person(s) signing the bid.

2.6 Sealing and Marking of Techno Commercial Bid (Part-I)

- 2.6.1 The bidder shall submit the following documents of **Techno Commercial Bid (Part-I)** bid in a packet bearing the TENDER no. "...":
 - i. Covering letter in the format specified under the schedule as **Appendix-I**
 - ii. Details of the bidder in the format prescribed at Appendix-II
 - iii. The Bid Security in the format prescribed at **Appendix-III**, and marked as 'Bid Security' on the packet.
 - iv. Power of Attorney for signing of bid in the prescribed format (**Appendix-IV A**).
 - v. Power of Attorney for Lead Member of Consortium in the prescribed format (**Appendix-IV B**)
 - vi. Joint Bidding Agreement in the prescribed format (**Appendix-IV C**)
 - vii. Integrity Pact Agreement (Appendix-V & VA)
 - viii. Proof of eligibility criteria in the format prescribed at **Appendix-VI & VII**
 - ix. Minimum no of details of equipment including make and year of make in the format prescribed at **Appendix-VIII**
 - x. Statement of Legal Capacity of the bidder in the format prescribed at **Appendix-IX A**
 - xi. Proposed Site Organization in the format prescribed at **Appendix-IX B**
 - xii. Certificate of Site visit in the format prescribed at **Appendix-IX C**
 - xiii. Screen shot of mock submission of e-bid at Mjunction at Appendix-IX D.
 - xiv. A copy of the tender document with each page initialed by the person signing the bid in pursuance of the power of attorney.
 - a. Part II (Price Bid) consisting of the quotation of prices shall only be done in the e tendering Portal and no packet consisting hard copy of the Price Bid may be sent to HCL office.

- 2.6.2 The documents (original and/or true copy) accompanying the bid, shall be placed in hard binding and the pages shall be numbered serially. Each page thereof shall be initialized by the authorized signatory.
- 2.6.3 The packet shall clearly bear the following identification:

"Shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan" and shall clearly indicate the name and address of the bidder. In addition, the bid due date should be indicated on the right hand top corner of the packet.

2.6.4 The packet shall be addressed to:

ATTN. OF: Executive Director (Materials and Contracts)

ADDRESS: Hindustan Copper Limited

'Tamra Bhawan'

1, Ashutosh Chowdhury Avenue

Kolkata - 700 019

Email: dkmahajan@hindustancopper.com

- 2.6.5 If the packet is not sealed and marked as mentioned above, HCL shall not assume any responsibility for the misplacement or premature opening of the bid submitted and consequent losses, if any, suffered by the bidder.
- 2.6.6 Bids submitted by fax, telex, telegram or e-mail shall not be entertained and shall be rejected.
- 2.7 **Bid Due Date**
- 2.7.1 Due date of submission of Bid Documents is as per clause 1.13 in the e tendering portal and at the address mentioned above and in the manner and form as detailed in this TENDER.
- 2.8 HCL may, in its sole discretion, extend the bid due date by issuing an addendum.
- 2.9 Late Bids

Bids received by HCL after the **Bid Due Date** shall not be eligible for consideration and shall be summarily rejected.

2.10 Modifications/Substitution/Withdrawal of Bids

- 2.10.1 Except where expressly permitted by these instructions, the bidder shall not make or cause to be made any alteration, erasure or obliteration to the text of the documents prepared by HCL and submitted by the bidder with or as part of his bid.
- 2.10.2 No bid shall be modified, substituted or withdrawn by the bidder on its submission on the bid due date.
- 2.10.3 Withdrawal of a bid during the interval between the deadline for submission of bids and expiration of the period of bid validity specified in the bid shall result in the forfeiture of Bid Security.

2.11 **Rejection of Bids**

- 2.11.1 Notwithstanding anything contained in the tender, HCL reserves the right to reject any bid and to annul the bidding process and reject all the bids at any time without any liability or any obligation for such rejection or annulment. In the event that HCL rejects all the bids or annuls the bidding process, it may, in its discretion invite all eligible bidders to submit fresh bids hereunder.
- 2.11.2 HCL reserves the right not to proceed with the bidding process at any time, without notice or liability, and to reject any bid without assigning any reasons.

2.12 **Confidentiality**:

Information relating to the examination, clarification, recommendation and evaluation of the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising HCL in relation to or matters arising out of, or concerning the bidding process. HCL will treat all information, submitted as part of the bid, in confidence and will require all those who have access to such material to treat the same in confidence. HCL may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/or HCL or as may be required by law or in connection with any legal process.

2.13 Correspondence with the Bidder:

Save and except as provided in this tender, HCL shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

c. BID SECURITY

2.14 **Bid Security**

- 2.14.1 The Bidder shall have to furnish Rs 50 lakh only as part of its bid, a Bid Security in the form of a Demand Draft/Pay Order/Banker's Cheque or a bank guarantee issued by any scheduled commercial bank, drawn in favour of Hindustan Copper Limited and payable at Kolkata, in the format at **Appendix III** (in case of "**Bank Guarantee**") and having a validity period of not less than 180 (one hundred and eighty) days from the Bid Due Date, inclusive of a claim period 60 (sixty) days, and which may be extended for a maximum period of another 90 (ninety) days, if required by HCL.
- 2.14.2 HCL shall not be liable to pay any interest on the Bid Security so made and the same shall be interest free.
- 2.14.3 Any bid not accompanied by the Bid Security shall be summarily rejected by HCL as non-responsive subject to exemptions, if any, indicated in the tender documents.
- 2.14.4 HCL shall be entitled to forfeit, invoke and appropriate the Bid Security as damages inter alia in any of the events specified below. The bidder, by submitting its bid pursuant to this tender, shall be deemed to have acknowledged and confirmed that HCL will suffer loss and damage on account of withdrawal of its bid or for any other default by the bidder during the Bid validity period as

specified in this tender. No relaxation of any kind on Bid Security shall be given to any bidder.

- 2.14.5 Under the following conditions, the Bid Security shall be forfeited, invoked as damages without prejudice to any other right or remedy that may be available to HCL under the bidding documents and/or under the Contract, or otherwise,:
 - (a) If a bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice.
 - (b) If a bidder withdraws its bid during the period of validity of bids as specified in this tender and as extended on instructions of HCL;
 - (c) In the case of selected bidder, if it fails within the specified time limit -
 - (i) to sign and return the duplicate copy of the LoI; and/or
 - (ii) To do all such acts as are required under this tender or before signing of the Contract; and/or
 - (iii)To furnish the Performance Security within the period prescribed there for.
- 2.14.6 The following are exempted from submission of Bid Security:
 - Public Sector Undertakings /Govt. Dept/Govt. Institutions
 - Micro and Small Enterprises registered with Districts Industries Centers (DICs) / Khadi & Village Industries Commissions (KVIC) / Khadi & Village Industries Board (KVIB) / Coir Board/NSIC/Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small & Medium Enterprises (MoMSME) up to the extent of their monetary limit.
 - Original Equipment Manufacturers (OEMs).
- 2.14.7 Earnest Money will be returned to the Techno Commercially disqualified bidder within 7 (seven) days of the disqualification notification.

3. EVALUATION OF BIDS:

3.1 Opening and Evaluation of Bids

3.1.1 HCL shall open the Techno Commercial Bid (Part – I) on e tendering portal and hard copy documents of Part I received by post at HCL, as per schedule given in clause 1.13 in the presence of the bidders who choose to attend. However, in the eventuality that the day of opening of the bids becomes a non-working day due to a force majeure event, the date of opening of the bids will shift to the next working day at the same time.

Part II of the bid ("Price Bid") shall be opened in the e tendering portal for those bidders who qualify techno-commercially as per qualifying criteria of the tender. The date and time of opening of Price Bid (Part – II) B shall be communicated in due course of time.

3.1.2 To facilitate evaluation of bids, HCL may, in its sole discretion, seek clarifications in writing from any / all Bidder(s) regarding its Bid.

3.2 Correction of Errors:

- 3.2.1 Financial bid submitted by the bidders will be checked by HCL for any arithmetical errors in computation and summation during financial evaluation. Errors will be corrected by HCL and followings will be applicable:
 - a. Where there is a discrepancy between amounts in figures and words, the lower of the two will govern in all cases,
 - b. Where there is a discrepancy between the total amount of an item quoted by the bidder and amount derived from the multiplication of the unit price and the quantity, the lower of the two will govern in all cases,
 - c. Where there is a discrepancy in total summation as quoted by the bidder and as derived from calculation, the lower of the two will govern in all cases.
- 3.2.2 If a bidder does not accept the correction of errors as outlined above, his TENDER will be rejected and the bid security will be forfeited.

3.3 Selection of Bidder

- 3.3.1 The bidder whose bid is adjudged as responsive and quoting the lowest Contract Price evaluated on the basis of quantities in Schedule of Quantity and rate, for implementation of the Work shall be declared as the selected bidder (the "**Selected Bidder**").
- 3.3.2 After selection, a Letter of Intent (the "**LoI**") shall be issued, in duplicate, by HCL to the selected bidder and the selected bidder shall, within 7 (seven) days of the receipt of the LoI, sign and return the duplicate copy of the LoI in acknowledgement thereof. In the event the duplicate copy of the LoI duly signed by the selected bidder is not received within the stipulated time, HCL may, unless it consents to extension of time for submission thereof, appropriate/invoke the Bid Security of such bidder as damages on account of failure of the selected bidder to acknowledge the LoI. No correspondence will be entertained by HCL from the unsuccessful bidders.
- 3.3.3 After acknowledgement of the LoI as aforesaid by the selected bidder, it shall cause the selected bidder to execute the Contract within the period of ten (10) days. The Selected Bidder shall not be entitled to seek any deviation, modification or amendment in the Contract.
- 3.3.4 Upon "Letter of Intent" being signed and returned by the successful Bidder, HCL will discharge/return bid security to other unsuccessful bidders.
- 3.3.5 The selected bidder shall, for the due and proper performance and fulfillment of its obligations during the contract period of the Work, provide an irrevocable and unconditional bank guarantee from any scheduled commercial bank in India, in favour of HCL, for a sum equivalent to 5% of the total contract amount in the form set-forth in the Contract (the "Performance Security Deposit"). Performance Security Deposit in any other format is not acceptable. Payment shall not be released if PSD has not been deposited in totality. The Performance Security Deposit shall remain valid for

a period of **84 months** from the date of issue of LoI and will be renewed subsequently as per Article 6 of NIT. The selected bidder shall further extend the validity of its Performance Security Deposit, if so required by HCL.

The said Performance Security Deposit shall be provided by the selected bidder within **30** (**thirty**) **days** of the date of issue of LoI. In the event, the selected bidder fails to provide the said Performance Security within the time period stipulated herein, HCL may forfeit the Bid Security submitted by the selected bidder along with their bid.

3.4 FRAUD AND CORRUPT PRACTICES

- 3.4.1 The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOI and during the subsistence of the Contract. Notwithstanding anything to the contrary contained herein, or in the LOI or the Contract, HCL shall reject a Bid, withdraw the LOI, or terminate the Contract, as the case may be, without being liable in any manner whatsoever to the Bidder or Selected Bidder, as the case may be, if it determines that the Bidder or Selected Bidder, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, HCL shall forfeit and appropriate the Bid Security or Performance Security, as the case may be, as damages, without prejudice to any other right or remedy that may be available to HCL under the Bidding Documents and/or the Contract, or otherwise.
- 3.4.2 Without prejudice to the rights of HCL under clause 4.1 hereinabove and the rights and remedies which HCL may have under the LOI or the Contract, if a Bidder or Selected Bidder, as the case may be, is found by HCL to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOI or the execution of the Contract, such Bidder or Selected Bidder shall not be eligible to participate in any tender or request for proposal issued by HCL during a period of 2 (two) years from the date such Bidder or Selected Bidder, as the case may be, is found by HCL to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.
- **3.4.3** For the purposes of this clause 4, the following terms shall have the meaning hereinafter respectively assigned to them:
 - (a) "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of HCL who is or has been associated in any manner, directly or indirectly with the Bidding Process or the LOI or has dealt with matters concerning the Contract, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of HCL, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOI or after the execution of the Contract, as the case may be, any person in respect of any matter relating to the Project or the LOI or the Contract, who at any time has been or is a legal, financial or technical adviser of HCL in relation to any matter concerning the Project;

- (b) "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
- (c) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding Process;
- (d) "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by HCL with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- (e) "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among the Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

4. PRE-BID CONFERENCE

- 4.1 Pre-Bid conference of the Bidders shall be convened at a designated date, time and place. A maximum of five representatives of each Bidder shall be allowed to participate.
- 4.2 During the course of the pre-Bid conference, the Bidders will be free to seek clarifications and make suggestions for consideration of HCL. HCL shall endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.
- 4.3 The Bidders are requested to submit any question/query by email to reach HCL as per 1.13 Schedule of Bidding Process.
- 4.4 Non-attendance at the pre-bid conference will not be a cause for disqualification of a Bidder.

APPENDIX - I

Covering Letter (To be placed in Part I of the Bid)

Date:

Executive Director (Commercial) Hindustan Copper Limited 1, Ashutosh Chowdhury Avenue Kolkata – 700019

Sub: Bid for for engineering, procurement and construction for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan

Dear Sir,

With reference to your tender no. HCL/M&C/KHETRI/SHAFT/2017/01 Dated 18.10.2017, I/We, having examined the Bidding Documents and understood their contents, hereby submit my/our Bid for the aforesaid Work in prescribed format. The Bid is unconditional and unqualified.

- I/We acknowledge that HCL will be relying on the information provided in the Bid and the
 documents accompanying the Bid for selection of the Selected Bidder for the aforesaid Work, and
 we certify that all information provided therein is true and correct and nothing has been omitted
 which renders such information misleading and all documents accompanying the Bid are true copies
 of their respective originals.
- 2. This statement is made for the express purpose of qualifying as a Selected Bidder for the implementation of the aforesaid Work.
- 3. I/ We shall make available to HCL any additional information it may find necessary or require to supplement or authenticate the Bid.
- 4. I/ We acknowledge the right of HCL to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- 5. We certify that in the last 3 (three) years, we have neither failed to perform on any contract, as evidenced by the imposition of a penalty or a judicial pronouncement or arbitration award, nor have been expelled from any work or contract nor have had any contract terminated for breach on our part.
- 6. I/ We declare that:
 - (a) I/ We have examined and have no reservations to the Bidding Documents, including any addendum issued by HCL; and
 - (b) I/ We do not have any Conflict of Interest and

- (c) I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, in respect of any tender or request for proposal issued by or any agreement entered into with HCL or any other public sector enterprise or any government, Central or State; and
- (d) I/ We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
- (e) the undertakings given by me/us along with the offer in response to the Tender for the Work were true and correct as on the date of making the Tender and are also true and correct as on the Bid Due Date and I/we shall continue to abide by them.
- 7. I/ We understand that you may cancel/annul the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Work, without incurring any liability to the Bidders.
- 8. I/ We certify that in regard to matters other than security and integrity of the country, have not been convicted or indicted by a court of law and no adverse orders have been passed by a regulatory authority which could cast a doubt on our ability to undertake the Work or which relates to a grave offence that outrages the moral sense of the community.
- 9. I/ We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the government or convicted by a court of law for any offence committed by us or by any of our Associates.
- 10. I/ We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our Directors/ managers/ employees.
- 11. I/ We undertake that in case due to any change in facts or circumstances during the Bidding Process the provisions of disqualification in terms of the guidelines referred to above are attracted, we shall intimate HCL of the same immediately.
- 12. We further agree and acknowledge that the aforesaid obligations shall be in addition to the obligations contained in the Contract.
- 13. I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by HCL in connection with the selection of the Bidder, or in connection with the Bidding Process itself, in respect of the above mentioned Work and the terms and implementation thereof.
- 14. In the event of my/our being declared as the Selected Bidder, I/We agree to enter into a Contract in accordance that has been provided to me/us prior to the Bid Due Date. We agree not to seek any changes in the aforesaid Contract and agree to abide by the same.
- 15. I/We have studied all the Bidding Documents carefully and have also surveyed the Work site. We understand that except to the extent as expressly set forth in the tender and/or Contract, we shall have no claim, right or title arising out of any documents or information provided to us by HCL or in

- respect of any matter arising out of or concerning or relating to the Bidding Process including the award of the Contract.
- 16. The Contract Price has been quoted by me/us after taking into consideration all the terms and conditions stated in the tender, Contract, our own estimates of costs and after a careful assessment of the site and all the conditions that may affect the work cost and implementation of the Work.
- 17. I/We offer a bid security of Rs 50 Lakh only to HCL in accordance with the tender.
- 18. The Bid security in the form of a Demand Draft/Pay Order/Banker's Cheque/Bank Guarantee (strike out whichever is not applicable) is attached.
- 19. In the event of I/We being declared as Selected Bidder, I/We hereby undertake and agree to provide an irrevocable and unconditional bank guarantee as Performance Security Deposit in favour of HCL within 30 (thirty) days of the issue of LoI as per the tender.
- 20. I/ We agree and understand that the Bid is subject to the provisions of the Bidding Documents. In no case, I/we shall have any claim or right of whatsoever nature if the Work is not awarded to me/us or our Bid is not opened or rejected.
- 21. I/We agree to keep this offer valid for 180 (one hundred and eighty) days from the Bid Due Date specified in the tender.
- 22. I/ We hereby submit our Bid for undertaking the aforesaid work in accordance with the Bidding Documents and the Contract. The prices of each item aggregating to the Contract Price are quoted by me/us as provided in the schedule annexed hereto. The said Contract Price shall be payable over the construction period and as set out in Contract. The RA bills can be payable only after receipt of security deposit.
- 23. I/We hereby confirm that no change has been made in any of the formats attached with tender.
- 24. I/We agree and undertake to abide by all the terms and conditions of the tender and confirm that there is no deviation in the terms and conditions.

In witness whereof, I/we submit this Bid under and in accordance with the terms of the tender.

.	Yours faithfully,		
Date:	(Signature of the Authorized signatory)		
Place:			
	(Name and designation of the of the Authorized signatory)		

Name and seal of Bidder

APPENDIX - II DETAILS OF BIDDER

(In case of Consortium, details of the Lead Member & other Members of the Consortium to be given in separate sheets)

Name of the work: Tender for engineering, procurement and construction for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan

- 1.1 Name
- 1.2 Registration details, if any
- 1.3 Date of commencement of business
- 1.4 Permanent Account Number (PAN)
- 1.5 TIN
- 1.6 GST registration number
- 1.7 Copies of Balance sheet

2. IN CASE OF PARTNERSHIP:

- 2.1 Name of Partners
- 2.2 Whether the Partnership is registered or not.
- 2.3 Date of establishment of firm
- 2.4 Permanent Account Number (PAN)
- 2.5 TIN
- 2.6 GST registration number
- 2.7 Copies of Balance sheet

3. IN CASE OF LIMITED COMPANY:

- 3.1 Amount of paid-up capital
- 3.2 Name of Directors
- 3.3 Date of Registration of Company
- 3.4 Permanent Account Number (PAN)
- 3.5 TIN

ъı

- 3.6 GST registration number
- 3.7 Copies of the Balance sheet

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(Digitalato,	mamic and	acsignation	or the ri	uulolizea	Digitatory,

Place:	
Date:	Name and Seal of the Bidder

APPENDIX – III

Bank Guarantee for Bid Security

(To be placed in Part I of the Bid)

In consideration of you, Hindustan Copper Limited, having its office at 1, Ashutosh Chowdhury Avenue,

sub of_ reg	lkata – 700019 (hereinafter referred to as " HCL ", which expression shall unless it be repugnant to the oject or context thereof include its, successors and assigns) having agreed to receive the Bid a Company registered under the provision of the Companies Act, 1956 and having its distered office at (and acting on behalf of its consortium, if applicable) (hereinafter action of the Companies Act, 1956 and having its distance of the " Piddor " which appropriate a shall unless it be represent to the carbinate of the companies.
	terred to as the "Bidder" which expression shall unless it be repugnant to the subject or context
	reof include its/their executors, administrators, successors and assigns), for ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	rsuant to the tender datedissued in respect of the Work and other related
do	cuments (hereinafter collectively referred to as "Bidding Documents"), we, (indicate the name of the bank), (hereinafter referred to as the "Bank") at the
req	uest of (Bidder), do hereby undertake to pay HCL an amount not
suf	reeding Rs Lakh (Rupees Lakh only) against any loss or damage caused to or fered or would be caused to or suffered by HCL by reason of any breach by the said Bidder of any of terms or conditions contained in the Bidding Documents.
1.	We (indicate the name of the bank) do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from HCL stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by HCL by reason of breach by the said Bidder of any of the terms or conditions contained in the Bidding Documents or by reason of the Bidder's failure to fulfill or comply with all or any of the terms and conditions contained in the said Bidding Documents. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs
2.	We, the Bank, further agree that HCL shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Bidding Documents, and the decision of HCL that the Bidder is in

default as aforesaid shall be final and binding on us, notwithstanding any differences between HCL and the Bidder or any dispute pending before any court, tribunal, arbitrator or any other authority. Further, we undertake to pay to HCL any money so demanded notwithstanding any dispute or disputes raised by the Bidder(s) in any suit or proceeding pending before any court or

tribunal/relating thereto, our liability under this present being absolute and unequivocal.

	payment so made by us under this guarantee shall be a valid discharge of our liability for payment hereunder and the Bidder shall have no claim against us on making such payment.
3.	We,(indicate the name of the bank) further agree that the guarantee herein contained shall be irrevocable and remain in full force and effect for a period of 180 (One Hundred and Eighty) days from the Bid Due Date inclusive of a claim period of 60 (Sixty) days or as extended for a maximum period of another 90 (Ninety) days as required by HCL and shall continue to be enforceable till all the dues of HCL under or by virtue of the said Bidding Documents have been fully paid and its claims satisfied or discharged or the
	(office/Department) certifies that the terms and conditions of the said Bidding Documents have been fully and properly carried out by the said Bidder and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the we shall be discharged from all liability under this guarantee thereafter.
4.	We,further agree with HCL that HCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms & conditions of the said Bidding Documents or to extend the validity period of this guarantee or to postpone for any time or from time to time any of the powers exercisable by HCL against the said Bidder and to forebear or enforce any of the terms and conditions relating to the said Bidding Documents and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Bidder or for any forbearance, act or commission on the part of HCL or any indulgence by HCL to the said Bidder or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
5.	This guarantee will not be discharged due to the change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.
6.	It shall not be necessary for HCL to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which HCL may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.
7.	We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of HCL in writing.
	Dated theDay of
	For
	(Indicate the name of bank)

APPENDIX - IV A

Power of Attorney for signing of Bid (To be placed in Part I of the Bid)

Know all men by these presents, We	, (name of the company and address
	revocably constitute, nominate, appoint and authorize Mr. /
Ms, son/daughter/wife of	f and presently residing at, who is
holding the position of], as our true and lawful attorney (hereinafter referred to
	d on our behalf, all such acts, deeds and things as are necessary
	dental to submission of our Bid for the " [insert name of the
	opper Limited ("HCL") including but not limited to signing and
	ner documents and writings, participation in Bidders' and other
	responses to HCL, representing us in all matters before HCL,
	cluding the Contract and undertakings consequent to acceptance
	CL in all matters in connection with or relating to or arising out
•	on award thereof to us and/or till the execution of the Contract
with HCL.	
• •	firm and do hereby ratify and confirm all acts, deeds and things
	our said Attorney pursuant to and in exercise of the powers
	d that all acts, deeds and things done by our said Attorney in
exercise of the powers hereby conferred	shall and shall always be deemed to have been done by us.
IN WITNESS WHEREOF WE, _	, THE ABOVE NAMED PRINCIPAL
HAVE EXECUTED THIS POWER OF	ATTORNEY ON THISDAY OF, 2017.
For	
	(Signature)
	(Name, Title and Address)
Witnesses	(,
Witnesses:	
1.	
2.	
Accepted	[Notarized]
(Signature)	(Name, Title and Address of the Attorney)
Notes:	

- The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required, the name should be under common seal affixed in accordance with the required procedure.
- Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a resolution/power of attorney in favour of the person executing this power of attorney for the delegation of power hereunder on behalf of the Bidder.

APPENDIX – IV B

Power of Attorney for Lead Member of Consortium

(To be placed in Part I of the Bid)

Whereas the Hindustan Copper Limited (" HCL") has invited Bids from bidders for engineering procurement and construction for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan. Whereas, and (collectively the "Consortium") being members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the NIT and other connected documents in respect of the work, and
Whereas, it is necessary for the members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts deeds and things as may be necessary in connection with the Consortium's Bid for the entire work and its execution.
NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS
We, M/s, having our registered office at, having our registered office at, [the respective names and addresses of the registered office (hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate constitute, appoint and authorise M/s, having its registered office at, being one of the members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (hereinafter referred to as the "Attorney") and hereby irrevocably authorise the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the Bidding Process and, in the event the Consortium is awarded the Contract, during the execution of the entire work, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of sucl acts, deeds or things as are necessary or required or incidental to the submission of its Bid for the entire work, including but not limited to signing and submission of all applications, Bids and other document and writings, participation in Bidders' and other conferences, respond to queries, submit information documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the Consortium and generally to represent the Consortium in all its dealings with HCL, and/ or any othe government agency or any person, in all matters in connection with or relating to or arising out of the Consortium's Bid for the entire work and/ or upon award thereof till the Contract is entered into with HCL.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this power of attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/Consortium.

N WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS
OWER OF ATTORNEY ON THIS DAY OF 20**.
For
Name & Title)
For
Name & Title)
Vitnesses:
•
•
Executants)
To be executed by all the Members of the Consortium)
T ,

Notes:

- 1) The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- 2) Also, wherever required, the Consortium members should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this power of attorney for the delegation of power hereunder on behalf of the Consortium members.

APPENDIX - IV C

Joint Bidding Agreement

(To be placed in Part I of the Bid)

(To be executed on Non-Judicial Stamp Paper of appropriate value)

This Joint Bidding Agreement (the "AGREEMENT") made at on this day of, 201
AMONGST
{ Limited, a company incorporated under the companies Act, 1956} and having its registered office at (herein after referred to as "First Part", which expression shall unless repugnant to the context include its successors and permitted assigns)
AND
{ Limited, a company incorporated under the companies Act, 1956} and having its registered office at (herein after referred to as "Second Part", which expression shall unless repugnant to the context include its successors and permitted assigns)
The above mentioned parties of the FIRST and SECOND PART are collectively referred to as the "Parties" and each is individually referred to as a "Party".
WHEREAS:
A. Hindustan Copper Limited (HCL), invites applications by its NIT for short-listing of bidders for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan (hereinafter referred to as the "work")
B. The Parties are interested in jointly bidding for the work as members of a Consortium and in accordance with the terms and conditions of the NIT, and
C. It is necessary condition under the NIT that the members of the Consortium shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Application.
NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalized term shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFQ.

2. Consortium

- a) The Parties do hereby irrevocably constitute a consortium (the "Consortium") for the purpose of jointly participating in the Bidding Process for the Project
- b) The Parties hereby undertake to participate in the Bidding Process only through this Consortium and not individually and/ or through any other Consortium constituted for this Project, either directly or indirectly or through any of their Constituents.

3. Covenants

The Parties hereby undertake that in the event the Consortium is declared the selected Bidder and awarded the Work, it shall enter into an Agreement with HCL and for performing all its obligations as the developer in terms of the Agreement for the work.

4. Roles of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

a.	Party of the First Part shall be the Lead member of the Consortium and shall have the power of			
attorney from all Parties for conducting all business for and on behalf of the Consortium dur				
	the Bidding Process and under the Agreement when all the obligations under the agreement sha			
	become effective. The role of First Part shall (in the event that it is a technical member)			
	be, or (in the event that it is a financial member) be			
b.	Party of the Second Part shall be the Financial / Technical Member {delete as appropriate, based			
	on who is being nominated as the Lead Member} and the role of Second Part shall			

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the work and in accordance with the terms of the NIT and the Agreement.

6. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- a) Such Party is duly organized, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- b) The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium member is annexed to this Agreement, and will not, to the best of this knowledge
 - i. require any consent or approval not already obtained;
 - ii. violate any Applicable Law presently in effect and having applicability to it;

- iii. violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
- iv. create or impose any liens, mortgages, pledges, claims, security, interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or businesses of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- v. this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- vi. there is no litigation pending, or to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement

7. Termination

In case the work is awarded to the Consortium, this Agreement shall be effective from the date hereof and shall continue in full force and effect till the execution of the Completion of the work as specified under the Agreement. However, in case the Consortium is either not pre-qualified for the work or does not get selected for award of the work, the Agreement will stand terminated in case the Applicant is not pre-qualified or upon return of the Bid Security by HCL to the Bidder, as the case may be.

8. Miscellaneous

- a) This Joint Bidding Agreement shall be governed by laws of India.
- b) The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of HCL.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED,	, SEALED	AND D	ELIVE	KED

For and on behalf of Lead Member	· by:	
Signature:		

Name & Designation:		
Address:		
E	D4 b	
For and on behalf of Second	Part by:	
Signature:		
Name & Designation:		
Address:		

Note:

• The mode of execution of the Joint Bidding Agreement should be in accordance with the procedure, if any laid down by the applicable law and the charter documents of the executants(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

APPENDIX – V

(To be placed in Part I of the Bid)

INTEGRITY PACT

The Integrity Pact ("Pact") essentially envisages an agreement between the Bidder and the owner ("HCL"), committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the Contract. Only those Bidders who have entered into such a Pact with the HCL would be qualified to submit their bids. In other words, entering into this Pact would be a preliminary qualification. The Pact shall be effective from the stage of invitation of Bids till the execution of the Contract. Thereafter, the Selected Bidder shall be required to execute a separate Integrity Pact, which shall form part of, and be appended to the Contract.

The Pact envisages a panel of Independent External Monitors ("**IEM**") approved for HCL. The IEM is to review independently and objectively, whether and to what extent the parties have complied with their obligations under the Pact. It has right of access to all Work documentation. The IEM may examine any complaint received by it and submit a report to the CMD of HCL, at the earliest. He may also submit a report directly to the Chief Vigilance Officer and the Central Vigilance Commission, in case of suspicion of serious irregularities attracting the provisions of the Prevention of Corruption Act. However, even though the Contract may be covered by the Pact, the Central Vigilance Commission may, at its discretion, have any complaint received by it relating to such a Contract, investigated.

The IEM on the advice of CVC has been appointed by HCL, who has been assigned by HCL to oversee implementation of the Pact relating to the Contract, in line with the terms and conditions of the Integrity Pact Agreement, to be signed between the Bidder and HCL.

APPENDIX - VA

INTEGRITY PACT AGREEMENT

Between
Hindustan Copper Limited (HCL) hereinafter referred to as "the Principal"
And
hereinafter referred to as "The Bidder(s) / Contractor(s)"

Preamble

The Principal intends to award, under laid down organizational procedures, Contract/s of "______". The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal has appointed Sri M.K.Deshmukh and Sri Narendra Kothari an Independent External Monitors (IEMs), who will monitor the tender Process and the execution of the Contract for compliance with the principles mentioned above.

Section I – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b. The Principal will, during the Tender Process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender Process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the Contract execution.
 - c. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC / PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

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

- (1) The Bidder(s) / Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the Contract execution.
 - a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the Contract.
 - b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of Bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder(s) / Contractor(s) will not commit any offence under the IPC / PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d. The Bidder(s) / Contractor(s) of foreign origin shall disclose the name and address of the agents / representatives in India, if any. Similarly, the Bidder(s) / Contractor(s) of the Indian nationality shall furnish the name and address of the foreign Principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent / representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is annexed and as Annex.- A.
 - e. The Bidder(s) / Contractor(s) will, when presenting his Bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- (2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

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

If the Bidder(s) / Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s) / Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of Business Dealings". Copy of the "Guidelines on Banning of Business Dealings" is annexed and marked as Annex. – B.

Section 4 – Compensation for damages

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

Section 5 – Previous transgression

- 1. The Bidder declares that no previous transgressions occurred in the last 3 (three) years with any other company in any country conforming to the anti corruption approach or with any other public sector enterprise in India that could justify his exclusion from the tender process.
- 2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken against them as per the procedure mentioned in "Guidelines on Banning of Business Dealings".

Section 6 - Equal treatment of all Bidders / Contractors / Subcontractors

- 1. The Bidder(s) / Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact Agreement, and to submit it to the Principal before Contract signing.
- 2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- 3. The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

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

Section 8 - Independent External Monitor/Monitors

- 1. The Principal has appointed competent and credible Independent External Monitor(s) ("IEMs") for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs its functions neutrally and independently. He reports to the Chairman- cum-Managing Director, HCL.

- 3. The Bidder(s) / Contractors(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his Project documentation. The same is applicable to Subcontractors. The Monitor is under a contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Subcontractor(s) with confidentiality.
- 4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided that such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 5. As soon as the Monitor notices, or believes to notice, a violation of this Agreement, he will so inform the management of the Principal and request the management to discontinue or take corrective action, or to take other relevant action. The Monitor can, in this regard, submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6. The Monitor will submit a written report to the Chairman-cum-Managing Director, HCL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 7. If the Monitor has reported to the Chairman-cum-Managing Director, HCL, a substantiated suspicion of an offence under relevant IPC / PC Act, and the Chairman-cum-Managing Director, HCL has not, within reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 8. The word "Monitor" would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 (twelve) months after the last payment under the Contract, and for all other Bidders 6 (six) months after the Contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/determined by Chairman-cum-Managing Director of HCL.

Section 10 - Other provisions

1. This agreement is subject to Indian law. Place of performance and jurisdiction is the registered office of the Principal, i.e. Kolkata.

- 2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a Partnership or a Consortium, this Agreement must be signed by all the partners or Consortium members.
- 4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf of the Principal)	(For & On behalf of The Bidder(s) / Contractor(s)		
(Office Seal)	(Office Seal)		
Witness 1:			
(Name & Address)			
Witness 2:			
Name & Address)			

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

- 1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with HCL Plants/Units shall apply for registration in the prescribed Application –Form.
- 1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the principal to the agent before the placement of order by HCL Plants/Units.
- 1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order
- 2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA. IF ANY.
- 2.1 Tenderers of <u>Foreign nationality</u> shall furnish the following details in their offer:
 - 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
 - 2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.
 - 2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/representatives in India, may be paid by HCL in Indian Rupees only.
- 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:
 - 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e, whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.
 - 2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Tenderer for himself.
 - 2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by HCL in India in equivalent Indian

Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items .

- 2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission /remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
- 2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by HCL. Besides this there would be a penalty of banning business dealings with HCL or damage or payment of a named sum.

GUIDELINES ON BANNING OF BUSINESS DEALINGS

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1.	Introduction
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6.	Ground on which Banning of Business Dealing can be initiated
7.	Banning of Business Dealings
8.	Removal from List of Approved Agencies-Suppliers/
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10.	Appeal against the Decision of the Competent Authority
11.	Review of the Decision by the Competent Authority
12.	Circulation of the names of Agencies with whom Business
	Dealings have been banned

Introduction

- 1.1 Hindustan Copper Limited (HCL), being a Public Sector Enterprise and 'State', within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. HCL has also to safeguard its commercial interests. HCL deals with Agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of HCL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on HCL to observe principles of natural justice before banning the business dealings with any Agency.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

Scope

- 2.1 The General Conditions of Contract (GCC) of HCL generally provide that HCL reserves its rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation. If such provision does not exist in any GCC, the same may be incorporated.
- 2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies / customers / buyers, who indulge in lifting of material in unauthorized manner. If such a stipulation does not exist in any Sale Order, the same may be incorporated.
- 2.3 However, absence of such a clause does not in any way restrict the right of Company (HCL) to take action / decision under these guidelines in appropriate cases.
- 2.4 The procedure of (i) Removal of Agency from the List of approved suppliers / contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.
- 2.5 These guidelines apply to all the Plants / Units and subsidiaries of HCL.
- 2.6 It is clarified that these guidelines do not deal with the decision of the Management not to entertain any particular Agency due to its poor / inadequate performance or for any other reason.
- 2.7 The banning shall be with prospective effect, i.e., future business dealings.

3. Definitions

In these Guidelines, unless the context otherwise requires:

'Party / Contractor / Supplier / Purchaser / Customer/Bidder/Tenderer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. 'Party / Contractor / Supplier / Purchaser / Customer/ Bidder / Tenderer' in the context of these guidelines is indicated as 'Agency'.

'Inter-connected Agency' shall mean two or more companies having any of the following features:

If one is a subsidiary of the other.

If the Director(s), Partner(s), Manager(s) or Representative(s) are common:

If management is common;

If one owns or controls the other in any manner;

'Competent Authority' and 'Appellate Authority' shall mean the following:

For Company (entire HCL) Wide Banning

The Director (Technical) shall be the 'Competent Authority' for the purpose of these guidelines. Chairman, HCL shall be the 'Appellate Authority' in respect of such cases except banning of business dealings with Foreign Suppliers of imported coal/coke.

For banning of business dealings with Foreign Suppliers of imported coal/coke, HCL Directors' Committee (SDC) shall be the 'Competent Authority'. The Appeal against the Order passed by SDC, shall lie with Chairman, as First Appellate Authority.

In case the foreign supplier is not satisfied by the decision of the First Appellate Authority, it may approach HCL Board as Second Appellate Authority.

For Plants / Units only

Any officer not below the rank of General Manager / Addl Director appointed or nominated by the Unit Head of concerned Plant / Unit shall be the 'Competent Authority' for the purpose of these guidelines. The Unit Heads of the concerned Plants / Unit shall be the 'Appellate Authority' in all such cases.

For Corporate Office only

For procurement of items / award of contracts, to meet the requirement of Corporate Office only, Head of M&C shall be the "Competent Authority" and Director (Technical) shall be the "Appellate Authority".

Chairman, HCL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.

'Investigating Department' shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.

'List of approved Agencies - Parties / Contractors / Suppliers / Purchasers / Customers / Bidders / Tenderers shall mean and include list of approved / registered Agencies - Parties/ Contractors / Suppliers / Purchasers / Customers / Bidders / Tenderers. etc.

4. Initiation of Banning / Suspension

Action for banning / suspension business dealings with any Agency should be initiated by the department having business dealings with them after noticing the irregularities or misconduct on their part. Besides the concerned department, Vigilance Department of each Plant / Unit /Corporate Vigilance may also be competent to initiate such action.

5. Suspension of Business Dealings

- 5.1 If the conduct of any Agency dealing with HCL is under investigation by any department (except Foreign Suppliers of imported coal/coke), the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to the Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.
- 5.2 The order of suspension shall be communicated to all Departmental Heads within the Plants / Units. During the period of suspension, no business dealing may be held with the Agency.
- As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.

- If the gravity of the misconduct under investigation is very serious and it would not be in the interest of HCL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may send his recommendation to Chief Vigilance Officer (CVO), HCL Corporate Office alongwith the material available. If Corporate Office considers that depending upon the gravity of the misconduct, it would not be desirable for all the Plants / Units and Subsidiaries of HCL to have any dealings with the Agency concerned, an order suspending business dealings may be issued to all the Plants / Units by the Competent Authority of the Corporate Office, copy of which may be endorsed to the Agency concerned. Such an order would operate for a period of six months from the date of issue.
- 5.6 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.
- 5.7 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

6. Ground on which Banning of Business Dealings can be initiated

- 6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;
- 6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or HCL, during the last five years;
- 6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- 6.4 If the Agency continuously refuses to return / refund the dues of HCL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;
- 6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;
- 6.6 If business dealings with the Agency have been banned by the Govt. or any other public sector enterprise;
- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts and / or fudging /forging /tampering of documents;

- 6.8 If the Agency uses intimidation / threatening or brings undue outside pressure on the Company (HCL) or its official in acceptance / performances of the job under the contract:
- 6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- 6.10 Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-despatch inspection was carried out by Company (HCL) or not;
- 6.11 Based on the findings of the investigation report of CBI / Police against the Agency for malafide / unlawful acts or improper conduct on his part in matters relating to the Company (HCL) or even otherwise;
- 6.12 Established litigant nature of the Agency to derive undue benefit;
- 6.13 Continued poor performance of the Agency in several contracts;
- 6.14 If the Agency misuses the premises or facilities of the Company (HCL), forcefully occupies, tampers or damages the Company's properties including land, water resources, forests / trees, etc.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

7. Banning of Business Dealings

- 7.1Normally, a decision to ban business dealings with any Agency should apply throughout the Company including Subsidiaries. However, the Competent Authority of the Plant / Unit except Corporate Office can impose such ban unit-wise only if in the particular case banning of business dealings by respective Plant / Unit will serve the purpose and achieve its objective and banning throughout the Company is not required in view of the local conditions and impact of the misconduct / default to beyond the Plant / Unit. Any ban imposed by Corporate Office shall be applicable across all Plants / Units of the Company including Subsidiaries.
- 7.2For Company-wide banning, the proposal should be sent by the Plant / Unit to the CVO through the Head of the Plant / Unit setting out the facts of the case and the justification of the action proposed alongwith all the relevant papers and documents except for banning of business dealings with Foreign Suppliers of imported coal/coke.

The Corporate Vigilance shall process the proposal of the Plant / Unit for a primafacie view in the matter by the Competent Authority nominated for Company-wide banning.

The CVO shall get feedback about that agency from all other Plants / Units. Based on this feedback, a prima-facie decision for banning / or otherwise shall be taken by the Competent Authority.

If the prima-facie decision for Company-wide banning has been taken, the Corporate Vigilance shall issue a show-cause notice to the agency conveying why it should not be banned throughout HCL.

- After considering the reply of the Agency and other circumstances and facts of the case, a final decision for Company-wide banning shall be taken by the Competent Authority.
- 7.3 There will be a Standing Committee in each Plant / Unit to be appointed by Unit Head for processing the cases of "Banning of Business Dealings" except for banning of business dealings with foreign suppliers of coal/coke. However, for procurement of items / award of contracts, to meet the requirement of Corporate Office only, the committee shall be consisting of General Manager / Dy. General Manager each from Operations, Finance, Law & M&C. Member from M&C shall be the convener of the committee. The functions of the committee shall, inter-alia include:
 - To study the report of the Investigating Agency and decide if a prima-facie case for Company-wide / Local unit wise banning exists, if not, send back the case to the Competent Authority.
 - To recommend for issue of show-cause notice to the Agency by the concerned department.
 - To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
 - To submit final recommendation to the Competent Authority for banning or otherwise.
 - 7.4 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show-cause notice may be issued to the Agency as per paragraph 9.1 and an enquiry held accordingly.

8. Removal from List of Approved Agencies - Suppliers / Contractors, etc.

8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies

Suppliers / Contractors, etc.

- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE may not be given to the Agency concerned.
- 8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

9. Show-cause Notice

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or mis-behaviour may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of HCL, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass an appropriate speaking order:

For exonerating the Agency if the charges are not established; For removing the Agency from the list of approved Suppliers / Contactors, etc.

For banning the business dealing with the Agency.

9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

10. Appeal against the Decision of the Competent Authority

- 10.1 The Agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.
- 10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

11. Review of the Decision by the Competent Authority

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Unit Head / Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Unit Head / Competent Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the Standing Committee for examination and recommendation.

12. Circulation of the names of Agencies with whom Business Dealings have been banned

- 12.1 Depending upon the gravity of misconduct established, the Competent Authority of the Corporate Office may circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.
- 12.2 If Government Departments or a Public Sector Enterprise request for more information about the Agency with whom business dealings have been banned, a copy of the report of Inquiring Authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.
- 12.3 If business dealings with any Agency has been banned by the Central or State Government or any other Public Sector Enterprise, HCL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its inter-connected Agencies.
- 12.4 Based on the above, Plants / Units may formulate their own procedure for implementation of the Guidelines and same be made a part of the tender documents.

APPENDIX – VI

(To be placed in Part I of the Bid)

Information for Financial Qualification

Name of the Bio	dder:	
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		Year		
S. No.	Head	2014 / 2014-15	2015 / 2015- 16	2016 / 2016- 17
1.	Gross Turnover (Rs.)			
2.	Excise Duty (Rs.)			
	Turnover (1-2)			

Name of Statutory Auditor'	firm:	
Seal of the Statutory Auditor with Registration Number)	e's firm: (Signature, name and designation of the Authorized Signature)	gnatory along
Dated this day of	2017	
(Name & Signature of Auth	orized Signatory)	
	(position) duly authorized to sign this Tender (name of the Bidder).	for and behalf
	(Address)	

Instructions:

- 1. The Bidder shall attach copies of Audited Annual Reports for 3 (three) preceding years from the Bid Due Date. The Audited Annual Reports shall:
 - a. be audited by Statutory Auditor;
 - b. be complete, including all notes to the financial statements; and
 - c. correspond to accounting periods already completed and audited (no statements for partial period shall be requested or accepted).

APPENDIX – VII (To be placed in Part I of the Bid)

Information for Technical Qualification (Refer Pre-Qualification Criterion of the tender)

2. Name of the Bidder:

S No	Particulars		Details	Remarks (If any)
				(II ally)
1.	Name of the Organization	:		
2.	Officer- in-Charge	:		
3.	Description of Work & Quantity	:		
4.	Time Period (time period must be any period during the preceding seven (7) year period ending on the last day of the month previous to the one in which Notice Inviting Tender (NIT) is issued)	:		
5.	Period for execution of work as per work order/contract	:		
6	Actual time taken for satisfactory execution	:		
7	Actual work completed in a year	:		
8	Work Order proof	:	Attached Yes/no	

3. Certifica	LC.

	ion stated in the table above is correct and complete in all respect. Any error on a normation shall entitle HCL, at its sole discretion, to reject our Tender.	r
Dated this day of	·	
(Name & Signature of Author)	orized Signatory)	
In the capacity of	(position) duly authorized to sign this Tender for and behalf o (name of the Bidder).	f
	(Address)	

The bidders are advised to use separate sheets in case there are using the experience of more than one work for satisfying Technical Eligibility Criterion.

APPENDIX – VIII

(To be placed in Part I of the Bid)

RESOURCE MOBILIZATION TO COMMENCE THE WORK

1. Manpower:

S No.	Title	Within 4 months of mobilization period	Withinmonths after completion of mobilization period
1	Project Manager		
2	Mining Engineers I Class		
3	Mining Engineers II Class		
4	Mine Foreman		
5	Mining Mate		
6	Mining Blasters		
7	Skilled workers (Operators, fitters, welders, mechanics etc.		
8	Semi skilled workers miners, helpers etc		
9	Unskilled workers		
10	Others Administration, Time Office, Accounts, Lamp-room attendants etc.		
11	Miscellaneous		

2 Machinery

S No.	Title	Withinmonths after completion of mobilization period	months after
1	Sinking winders		
2	Shaft drilling machinery		
3	Shaft loading machinery like grab		
4	Drill machines for development		
5	Rock bolter with make		
6	Loading machinery		
7	Transportation machinery like Loco, mine cars		
8	Crane		
9	Shotcrete machine		
10	Water Pumps		
11	Ventilation Fans with capacities		
12	Transit mixer		
13	Concrete Mixer,		
14	Concrete Pumps		
15	Concrete placers		
16	Other machinery		

3. Others

	thers	 	
S No.	Title		Withinmonths after completion of mobilization period
1	Welding machines		
2	Electricals –Transformers, cables, switch gears, light fixtures		
3	Pipes and pipe fittings with sizes		
4	Utility vehicles- Truck, fork lift, explosive van, mobile crane		
5	Cap lamps		
6	Ventilation Ducts		
7	Rock bolts with sizes		
8	Steel of different sections		
9	Cement		
10	Aggregate and sand		
11	Safety wears and appliances (Shoes, helmet, apron, dust mask, face shields, etc.)		
12	Survey Instrument like Total station		
13	Office furniture		
14	Vehicles		
15	Time Office Records/statutory books		
16	Computers, plotter, digitizer		
17	Telephones at site office/working sites		
18	Others		

APPENDIX – IX A

(To be placed in Part I of the Bid)

STATEMENT OF LEGAL CAPACITY

[To be printed on the authorized Letterhead of the Bidder including full postal address, telephone no., fax no. and e-mail address]

	Date:
То	
[Insert the name and address]	
Dear Sir,	
We hereby confirm that we satisfy the terms and o	conditions laid out in the Tender document.
	dividual's name) will act as our representative and has ther, the authorized signatory is vested with requisites ame.
Thanking you,	
	Yours faithfully,
(Signa	ntory, name and designation of the authorized signatory) For and on behalf of

APPENDIX - IX B

HINDUSTAN COPPER LIMITED

CORPORATE OFFICE

KOLKATA

Name of work: Bid for engineering, procurement and construction for shaft deepening,

equipping and installation of ore handling system and allied excavations at

Khetri Mine, Khetri Nagar, Rajasthan.

Name of tenderer:		

PROPOSED SITE ORGANISATION

The tenderer is to indicate herewith proposed site organization to be set up for execution of the work which should include qualified Engineers & Mine foremen for supervision of the work as per statute. It is understood that this will be augmented from time to time depending on the requirements for timely completion of work as indicated by Engineer –in Charge.

Bio-data of Site-in-Charge and key personnel including the statutory Foremen/Mate/ Blaster etc.

NAME, ADDERSS & SIGNATURE OF THE TENDERER

APPENDIX – IX C HINDUSTAN COPPER LIMITED CORPORATE OFFICE KOLKATA

CERTIFICATE OF SITE VISIT

Name of work: Bid for engineering, procurement and construction for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan.

Name of tenderer:	
This is to certify that the authorised representatives of M/s	have visited
the site on / from to understand the work for the purpose partici	pating the above
tendering process.	

NAME, ADDERSS & SIGNATURE OF THE TENDERER

COUNTER SIGNATURE OF UNIT HEAD OR HIS REPRESENTATIVE

APPENDIX – IX D

HINDUSTAN COPPER LIMITED

CORPORATE OFFICE

KOLKATA

SCREEN SHOT OF MOCK SUBMISSION OF E-BID AT MJUNCTION

Name of work:	Bid for engineering, procurement and construction for shaft deepening, equipping and installation of ore handling system and allied excavations at Khetri Mine, Khetri Nagar, Rajasthan.
Name of tenderer: _	

NAME, ADDERSS & SIGNATURE OF THE TENDERER

APPENDIX - X

(Part II OF THE BID) (To be filled in e-tendering portal)

NAME OF WORK:

NAME OF THE BIDDER:

SCHEDULE OF RATES:

1. E	xcavation of Service shaft						
		Otv	Qty	Otv	Unit	Unit Rate	Amount
Sl. No.	Particulars			(in `)	(in `)		
1.1	Shaft Sinking: Sinking of 6.71 m x 5.53 m (-) 70 mRL to (-) 196 mRL as per approved drawing including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling of loose rock.	126	m	Not to be filled here	Not to be filled here		
1.2	Excavation for extension of existing shaft inset of 5.5 m x 3.0 m at (-) 60 mRL for a distance of 20 m including drilling blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock, rock bolting (1.5m) in grid pattern of 1.5 m x 1.5m, supply and laying of 60 lbs/yd track line with diamond crossing, supply and laying of 4" Flanged GI Pipe C/Air, 2" Flanged GI Pipe for Drilling water as per approved drawing.	20	m	Not to be filled here	Not to be filled here		
1.3	Shaft inset of 5.5 m x 3.0 m at (-) 120mRL and (-) 180mRL from shaft to a distance of 50 m including drilling blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock, rock bolting (1.5m) in grid pattern of 1.5 m x 1.5m, supply and laying of 60 lbs/yd track line with diamond crossing, supply and laying of 4" Flanged GI Pipe C/Air, 2" Flanged GI Pipe for Drilling water as per approved drawing,	100	m	Not to be filled here	Not to be filled here		
1.4	Excavation of brow at (-) 60 mRL, (-) 120 mRL and (-) 180 mRL and excavation for keps and bypass at (-) 120 mRL and (-)180 mRL, excavation for water garland in shaft above shaft insets at (-)60 mRL, (-)120 mRL including drilling, blasting, muck removal and disposal at 180 m RL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock as per approved drawing.	760	cum	Not to be filled here	Not to be filled here		

1.5				I	
	RCC of Service Shaft, brows and insets at different levels: Providing, transmitting, placing of RCC of 300 mm thickness of M-25 nominal with1:1:2 ratio (1 cement: 1 coarse sand: 2 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed) throughout the Shaft, concreting of 300 mm thickness to obtain 6.1 m x 4.93 m finished size and insets including providing, fixing, and removal of steel shuttering plates, staging, centring, cutting, bending, binding, fixing, welding including carriage of steel reinforcement, vibrating of concrete, fixing of insert plates & dowel bars and making of water garlands inclusive of all labour, material incidental charges etc. complete as per the approved drawing and direction of Engineer- in-charge including cost of reinforcement steel and cement.	1700	cum	Not to be filled here	Not to be filled here
1.6	Pulley Raise Stripping: Stripping of pulley raise from (-) 57mRL to (-) 40mRL to a size of 6.71 m x 5.53 m finished dia from the existing pulley raise of size 3m x 3m x 17m height from (-) 40 mRL (-) 57 mRL (pulley raise portion) as per approved drawing including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water, ventilation, scaling of loose rock as per approved drawing.	17	m	Not to be filled here	Not to be filled here
1.7	Shaft Sinking: Sinking/Raising of 6.71 m x 5.53 m (-) 18 mRL (-) 40 mRL as per approved drawing including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water, ventilation, scaling of loose rock, as per approved drawing.	22	m	Not to be filled here	Not to be filled here
1.8	Cleaning of shaft bottom from debris and other material at (-)18 mRL	1	no	Not to be filled here	Not to be filled here
1.9	Integrating with the existing system	1	LS	Not to be filled here	Not to be filled here
1.10	Excavation for sump at (-)180 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water, ventilation, scaling of loose rock, rock bolting (1.5m) in grid pattern of 1.5 m x 1.5m as per approved drawing	400	cum	Not to be filled here	Not to be filled here
1.11	Removal of (-) 60 mRL Service shaft sinking winder and other installations after completion of the job including transportation to surface.	1	LS	Not to be filled here	Not to be filled here
1.12	Removals of 0 mRL Service shaft incline winder and other installations after completion of the job including transportation to surface.	1	LS	Not to be filled here	Not to be filled here
	Total Amount				

2. ORE HOISTING SYSTEM

	2.1 Production Shaft	ı	T	T	
Sl. No.	Particulars	Qty	Unit	Unit Rate	Amount
51. 140.	1 at ticulars	Qıy	Omt	(in `)	(in `)
2.1.1	Supply and Installation of pumping system at (-) 120ML in BGML shaft including laying of cables, electrical items to pump water from (-)120 mRL to discharge at 0 MRL main sump through pipe lines and drains.	1	LS	Not to be filled here	Not to be filled here
2.1.2	Installation of winder at BGML shaft including partial modification of existing foundation if required, installation of winder with complete system, sheave pulley, rope, all electrical instruments, skip/ bucket for waste rock hoisting etc at 0 mRL as per approved drawing.	1	LS	Not to be filled here	Not to be filled here
2.1.3	Excavation of 3.5 m wide x 3.0 m high from BGML shaft to Production shaft end at (-)106 mRL and widening to 6.1 m dia below shaft including drilling, blasting, muck removal and disposal at 180 mRL, scaling and proper dressing of roof, supply and laying of 60 lbs/yd track, rock bolting (1.8m) in grid pattern 1.5 m x 1.5 m, supply and installation of 4" GI flanged pipe and 2" water GI flanged pipe with valves and intermittent tappings, 300 mm deep and wide RCC drain with manholes as per MMR 1961.	100	m	Not to be filled here	Not to be filled here
2.1.4	Excavation of 2.5 m wide x 2.5 m high from near Production shaft at (-)80 mRL to approach ventilation raise (-)106 mRL to (-)80 mRL including drilling, blasting, rock bolting (1.8m) in grid pattern 1.5 m x 1.5 m, muck removal and disposal at the 180 mRL	15	m	Not to be filled here	Not to be filled here
2.1.5	Raising of 2.5 m x 2.5 m vertical raise (For ventilation) from (-)106 mRL to (-)61 mRL including drilling, blasting, rock bolting (1.8m) in grid pattern 1.5 m x 1.5 m, muck removal and disposal at the 180 mRL	45	m	Not to be filled here	Not to be filled here
2.1.6	Excavation of 2.5 m wide x 2.5 m high from ventilation raise to near Production shaft and then holing through into production shaft at (-)65 mRL including drilling, blasting, rock bolting (1.8m) in grid pattern 1.5 m x 1.5 m, muck removal and disposal at the 180 mRL	10	m	Not to be filled here	Not to be filled here

2.1.7	Excavations for sinking winder chamber, vertical raise, rope raise, preparation of winder foundation, installation of sinking winder, pulley, loading/unloading arrangement rock bolting (1.8m) in grid pattern 1.5 m x 1.5 m, at (-)106 mRL etc including all electrical as per approved design.	1	LS	Not to be filled here	Not to be filled here
2.1.8	Sinking of 6.1 m dia shaft from (-)106 mRL to (-) 226 mRL including drilling, blasting, muck removal and disposal at the 180 m RL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock as per approved drawing	120	m	Not to be filled here	Not to be filled here
2.1.9	Excavation of shaft insets of 5.5 m x 3.0 m at (-) 180mRL from shaft to a distance of 30 m including drilling, blasting, muck removal and disposal at 180 m RL, pumping of water to any extent, rock bolting (1.5m) in grid pattern of 1.5m x1.5m as per approved drawing.	30	m	Not to be filled here	Not to be filled here
2.1.10	Excavation of 5.5 m wide x 3.0 m high drive/cross cut at (-)152 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, scaling and proper dressing of roof, rock bolting (1.5m) in grid pattern 1.5 m x 1.5 m, as per approved drawing.	30	m	Not to be filled here	Not to be filled here
2.1.11	Excavation of 5.5 m wide x 3.0 m high drive/cross cut at (-)180 mRL for conveyor belt including drilling, blasting, muck removal and disposal at the 180 mRL, pumping of water to any extent scaling and proper dressing of roof, rock bolting (1.5m) in grid pattern 1.5 m x 1.5 m, as per approved drawing.	30	m	Not to be filled here	Not to be filled here
2.1.12	CONCRETING OF SHAFT AND INSETS: Providing, transmitting, placing of RCC of 300 mm thickness of M-25 grade nominal with1:1:2 ratio (1 cement: 1 coarse sand: 2 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed) at fine ore bin and collars below (-) 180 mRL including providing, fixing, and removal of steel shuttering plates, staging, centring, cutting, bending, binding, fixing, welding including carriage of steel reinforcement, vibrating of concrete, fixing of insert plates and dowel bars as directed inclusive of all labour, material incidental charges etc. complete as per the drawing and direction of Engineer-in-charge including cost of reinforcement steel and cement.	400	cum	Not to be filled here	Not to be filled here

2.1.13	Providing, transmitting, placing of 300 mm PCC of M-15 grade with 1:2:4 ratio (1 cement : 2 coarse sand : 4 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed) throughout the shaft, Concreting of 300 mm thickness to obtain 5.5 m finished dia including providing, fixing, and removal of steel shuttering plates, staging, centring vibrating of concrete, fixing of insert plates and dowel bars as directed inclusive of all labour, material incidental charges etc. complete as per the drawing and direction of Engineer-in-charge.	1000	cum	Not to be filled here	Not to be filled here
2.1.14	Shaft Sinking: Sinking of 6.1 m dia including drilling, blasting, muck removal and disposal at the 180 m RL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock from (-)95mRL to (-) 86 mRL as per approved drawing	9	m	Not to be filled here	Not to be filled here
2.1.15	Pulley Raise stripping: Stripping of pulley raise (pulley raise portion 3m x 3m x 8m height) to a size of 6.1 m finished dia including drilling, blasting, muck removal and disposal at the 180 m RL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock from (-)103mRL to (-) 95 mRL as per approved drawing	8	m	Not to be filled here	Not to be filled here
2.1.16	Excavation of surge bin, measuring pocket, loading station at (-) 152 mRL &(-)180 mRL, brow at(-)106 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, scaling and proper dressing of roof, rock bolting (1.5m) in grid pattern 1.5 m x 1.5 m, as per approved drawing.	1500	cum	Not to be filled here	Not to be filled here
2.1.17	Cleaning of production shaft bottom from (-)80 mRL to (-)86 mRL from debris and other material	6	m	Not to be filled here	Not to be filled here
2.1.18	Removal of winder, pulley, loading/unloading arrangement at (-) 106mRL etc including all electricals after completion of the job and including transportation up to surface.	1	LS	Not to be filled here	Not to be filled here
2.1.19	Integrating with existing system	1	no	Not to be filled here	Not to be filled here
2.1.20	Removal of winder, pulley and other installation at 0 mRL including all electricals at BGML shaft after completion of the job and including transportation up to surface.	1	LS	Not to be filled here	Not to be filled here
Auxiliary s	haft for spillage reclamation	Т		T	
2.1.21	Excavation of drive of 3.5 m wide x 3.0 m high at (-)180 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock, rock bolting (1.5m) in grid pattern of 1.5m x1.5m as per approved drawing.	60	m	Not to be filled here	Not to be filled here

2.1.22	Miscellaneous excavation for installation of pulley, pulley raise, rope raise etc. including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock as per approved design	40	m	Not to be filled here	Not to be filled here
2.1.23	Excavation of winder chamber at (-) 180 mRL including drilling, blasting, muck removal and disposal at the 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock	50	cum	Not to be filled here	Not to be filled here
2.1.24	Preparation of winder foundation, Installation of winder, pulley, loading/unloading arrangement at (-)180ML Auxiliary shaft as per approved design.	1	LS	Not to be filled here	Not to be filled here
2.1.25	Winzing of 3.4 m dia from (-) 180 mRL to (-) 226 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock.	46	m	Not to be filled here	Not to be filled here
2.1.26	Equipping of winze from (-) 180 mRL to (-) 226 mRL with ladder way compartment, wire-mesh, ladders, platforms at 6m interval, including supply and laying of 2" Flanged GI Pipe C/Air, 4" GI flanged pipe, etc. as per approved drawing.	46	m	Not to be filled here	Not to be filled here
2.1.27	Excavation of drive of 3.5 m wide x 3.0 m high at (-)226 mRL from shaft including drilling, blasting, muck removal and disposal at the 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock as per approved drawing.	35	m	Not to be filled here	Not to be filled here
2.1.28	Excavation of sump below (-)226 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock, rock bolting (1.5m) in grid pattern of 1.5m x1.5m as per approved drawing	300	cum	Not to be filled here	Not to be filled here
2.1.29	Ventilation raise from (-)226 MRL to (-)210 MRL (2.5m x2.5m) and connection(2.5mx2.5m) with production shaft including drilling, blasting, muck removal and disposal at 180 mRL, and proper dressing of loose rock as per approved drawing.	30	m	Not to be filled here	Not to be filled here
				Not to be filled here	Not to be filled here
22()	Total Amount			, , , , ,	
	80mRL Crusher chamber and belt converged Excavation of drive of 3.5 m wide x 3.0 m high from new	yor s	ystem	Not to be	Not to be
2.2.1	ore pass at (-)180 mRL including drilling, blasting, muck removal and disposal at the 180 mRL, rock bolting in grid pattern of 1.5m x1.5m,pumping of water to any extent, ventilation, scaling down of loose rocks.	30	m	filled here	filled here

2.2.2	Excavation of drive of 3.5 m wide x 3.0 m high at (-)205 mRL from service winze to crusher chamber including drilling, blasting, muck removal and disposal at the 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m, pumping of water to any extent, ventilation, scaling down of loose rocks as per approved design.	25	m	Not to be filled here	Not to be filled here
2.2.3	Excavation for Horizontal conveyor drive of 3.5 m wide x 3.0 m high below crusher at (-)205 mRL including drilling, blasting, muck removal and disposal at 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m, ventilation, scaling down of loose rocks, manholes as per MMR 1961 etc. as per approved drawing.	20	m	Not to be filled here	Not to be filled here
2.2.4	Excavation of drive of 3.0 m wide x 3.0 m high at (-)196 mRL for opening crusher chamber including drilling, blasting, muck removal and disposal at 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m,pumping of water to any extent, ventilation, scaling down of loose rocks etc as per approved drawing.	30	m	Not to be filled here	Not to be filled here
2.2.5	Excavation of drive of 4 m wide x 3.0 m high at (-)180 mRL for rock breaker installation including drilling, blasting, muck removal and disposal at 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m,pumping of water to any extent, ventilation, scaling down of loose rocks as per approved design.	15	m	Not to be filled here	Not to be filled here
2.2.6	Excavation for sump at (-) 205 mRL including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water, ventilation, scaling of loose rock, rock bolting (1.5m) in grid pattern of 1.5 m x 1.5m, as per approved drawing.	200	cum	Not to be filled here	Not to be filled here
2.2.7	Excavation for installation of two (02) nos. rock breakers including foundation, roof stripping, pockets for cabin, grizzly blocks, allied excavation for feeder below ore pass etc. including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling down of loose rocks as per approved drawing.	650	cum	Not to be filled here	Not to be filled here
2.2.8	Excavation of drive of 3.0 m high x 3.5 m wide at (-) 180 mRL between production shaft, service shaft and crusher chamber including drilling, blasting, muck removal and disposal at 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock, supply and laying of 60 lbs/yd track, rock bolting (1.5m) in grid pattern of 1.5 m x 1.5m, supply and laying of 4"air GI flanged pipe and 2" GI flanged water pipe with valves and intermittent tapping and light fixtures at 6 m interval with 300 mm deep and 300 mm wide RCC drain.	1020	m	Not to be filled here	Not to be filled here

2.2.9	Excavation of crusher chamber, ROM bin below (-) 180 mRL and conveyor transfer, PLC room including drilling, blasting, muck removal and disposal at the 180 mRL, pumping of water to any extent, ventilation, scaling and proper dressing of loose rock.	3500	cum	Not to be filled here	Not to be filled here
2.2.10	Excavation for conveyor drive of 3.5 m wide x 3.0 m high at an inclination of + 7.5 Deg between crusher discharge to transfer point at (-) 180 mRL including drilling, blasting, muck removal and disposal at 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m, ventilation, scaling down of loose rocks, manholes as per MMR 1961and as per approved drawing.	192	m	Not to be filled here	Not to be filled here
2.2.11	Excavation for conveyor drive of 3.5 m wide x 3.0 m high at an inclination of +5 Deg between transfer point at (-)180 mRL to production shaft at (-) 152 mRL including drilling, blasting, muck removal and disposal at the 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m, ventilation, scaling down of loose rocks, manholes as per MMR 1961and as per approved drawing.	331	m	Not to be filled here	Not to be filled here
2.2.12	RCC of Crusher Chamber etc.: Providing, transmitting, placing of RCC of M-25 nominal with1:1:2 ratio (1 cement : 1 coarse sand : 2 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed) throughout the crusher chamber walls, ROM bin, crusher, vibratory feeder, disc screen, bottom feeder, grizzly block, rock breaker and conveyor belt foundation, including providing, fixing, and removal of steel shuttering plates, staging, centring, cutting, bending, binding, fixing, welding including carriage of steel reinforcement, vibrating of concrete, fixing of insert plates & dowel bars inclusive of all labour, material incidental charges etc. complete as per the approved drawing and direction of Engineer- in-charge including cost of reinforcement steel and cement.	1755	cum	Not to be filled here	Not to be filled here
2.2.13	Providing, transmitting, placing of PCC of M-15 grade with 1:2:4 ratio (1cement: 2coarse sand : 4 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed) in PLC room, including providing, fixing, and removal of steel shuttering plates, staging, centring vibrating of concrete, inclusive of all labour, material incidental charges etc. complete as per the approved drawing and direction of Engineer-in-charge.	80	cum	Not to be filled here	Not to be filled here

	Excavation of sub-station, 3nos one at Prod shaft,			Not to be	Not to be
	service shaft and for crusher each of (15 m x 4 m x 5			filled here	filled here
	m) including drilling, blasting, muck removal and				
2.2.14	disposal at the 180 mRL, rock bolting (1.5m) in grid	900	cum		
	pattern of 1.5m x1.5m, pumping of water to any				
	extent, ventilation, scaling down of loose rocks as per				
	approved design.				
	Total Amount				

3. SERVICE WINZE

J.	SERVICE WINZE				
3.1	Equipping of service winze from 0 mRL to (-) 244 mRL with ladder way compartment, wire-mesh, ladders, platforms at 6m interval etc. including supply, lowering and installation of 4" Flanged GI Pipe C/Air, 2" Flanged GI Pipe Drilling water & 4" Flanged GI Pipe Mine water delivery line including supply, lowering, fabrication, erection of raise equipping material.	244	m	Not to be filled here	Not to be filled here
3.2	Excavation of drive of 3.5 m wide x 3.0 m high at (-) 235 mRL including drilling, blasting, muck removal and disposal at the 180 mRL, rock bolting (1.5m) in grid pattern of 1.5m x1.5m,pumping of water to any extent, ventilation for pumping station as per approved drawing.	15	m	Not to be filled here	Not to be filled here
3.3	Supply and Installation of submersible pump in service winze including laying of cables, electrical items to pump water from (-) 235 mRL to discharge at 0 MRL main sump through pipe lines and drains.	1	LS	Not to be filled here	Not to be filled here
3.4	Horizontal mine development of size 3m x 3m at (-) 120 mRL from service winze to approach new ore pass location including drilling, blasting, muck removal and disposal at the 180 mRL, rock bolting in grid pattern of 1.5m x 1.5m, pumping of water to any extent, ventilation and scaling down of loose rocks.	60	m	Not to be filled here	Not to be filled here
3.5	Horizontal mine development of size 3.5m x 3m at (-) 180 mRL from service winze to approach new ore pass location including drilling, blasting, muck removal and disposal at the 180 mRL, supply and laying of tract 60 lbs/yd, rock bolting in grid pattern of 1.5m x 1.5m, pumping of water to any extent, ventilation and scaling down of loose rocks.	40	m	Not to be filled here	Not to be filled here
4.	ORE PASS SYSTEM				
4.1	Drop Raising of vertical ore pass of 3m dia. from (-) 180 mRL to (-)120 and from (-)120 mRL to (-) 80 mRL including drilling, blasting, muck removal and disposal at 180 m RL, pumping of water to any extent and ventilation.	95	m	Not to be filled here	Not to be filled here

4.2	Dismantling of steel and other structures from winze between 0 mRL to (-) 80 mRL including transportation to surface.	12	МТ	Not to be filled here	Not to be filled here
4.3	Connection between waste pass (180 mRL to 0 mRL) and new ore pass (0 mRL to (-)180 mRL) through inclined raise (3m x 3m) including drilling, blasting, muck removal and disposal through service shaft at 180 m RL, pumping of water to any extent and ventilation.	45	m	Not to be filled here	Not to be filled here
				Not to be	Not to be
	Total Amount			filled here	filled here

Not to be
filled here
filled here

5. WASTE PASS SYSTEM:

	ATASS STSTEM.			Not to be	Not to be
5.1	Horizontal mine development of size 3m x 3m at 0 ML from F/W drive to waste pass location including drilling, blasting, muck removal and disposal at 180 mRL, rock bolting in grid pattern of 1.5m x 1.5m, pumping of water to any extent, ventilation and scaling down of loose rocks.	15	m	filled here	filled here
5.2	Horizontal mine development of size 3m x 3m at (-)120 ML from service winze to waste pass location including drilling, blasting, muck removal and disposal at the 180 mRL, rock bolting in grid pattern of 1.5m x 1.5m, pumping of water to any extent, ventilation and scaling down of loose rocks.	105	m	Not to be filled here	Not to be filled here
5.3	Horizontal mine development of size 3m x 3m at (-)180 ML from F/W drive to waste pass location including drilling, blasting, muck removal and disposal at 180 mRL, rock bolting in grid pattern of 1.5m x 1.5m, pumping of water to any extent, ventilation and scaling down of loose rocks.	6	m	Not to be filled here	Not to be filled here
5.4	Drop Raising of vertical waste pass of 3m dia. from 0ML to (-)60ML, (-)60ML to (-)120 and from (-)120 mRL to (-)180 mRL including drilling, blasting, muck removal and disposal at 180 m RL, pumping of water to any extent and ventilation.	171	m	Not to be filled here	Not to be filled here
5.5	Excavation of Fork Raise (3 m x 3 m)of vertical waste pass at 0ML, (-)60ML & (-)120 including drilling, blasting, muck removal and disposal at 180 m RL, pumping of water to any extent and ventilation.	60	m	Not to be filled here	Not to be filled here

5.6	Excavation for installation of grizzly (3 m x 3 m) in waste pass at 0ML, (-) 60ML & (-)120ML including drilling, blasting, muck removal and disposal at 180 m RL, pumping of water to any extent and ventilation.	10	cum	Not to be filled here	Not to be filled here
5.7	Procurement, Fabrication, Lower, Erection and commissioning of compressed air operated chute in waste pass at (-)180 ML for GB loading	5	Т	Not to be filled here	Not to be filled here
	Total Amount			Not to be filled here	Not to be filled here

6. WASTE HOISTING SYSTEM AT 180 mRL

		Otro	Unit	Unit Rate	Amount
Sl. No.	Particulars	Qty	UIII	(in `)	(in `)
				Not to be	Not to be
				filled here	filled here
	Removal of 180 mRL winder and other			Not to be	Not to be
6.1	installations after completion of the job	1	LS	filled here	filled here
	including transportation to surface.				
	-			Not to be	Not to be
				filled here	filled here
	Total Amount				

7. SHAFT EQUIPPNIG

Sl. No.	Particulars	Otro	I Init	Unit Rate	Amount
		Qty	Unit	(in `)	(in `)
7.1	Service Shaft Equipping				
	Service shaft fabrication & erection				
7.1.1	Procure, fabricate, lower, install steel structure of various sizes and sections in the shaft for buntons, ladder ways, platform, guide rails (60 lbs/yd) keps, fencing, platform and any other structure required in the shaft as per approved drawing	132	t	Not to be filled here	Not to be filled here
7.1.2	Installation of pipes in shaft with gate valves and water taps.				
7.1.2.1	i. MS flanged pipe (12") with corrosion proof paint-2 length.	380	m	Not to be filled here	Not to be filled here
7.1.2.2	ii. MS flanged pipe (8") - 2 pipe lines	400	m	Not to be filled here	Not to be filled here
7.1.2.3	iii. GI flanged pipe (4")	230	m	Not to be filled here	Not to be filled here

7.2	Production Shaft Equipping				Not to be filled here
7.2.1	Removal of existing steel structures in the shaft below 0 m RL	50	t	Not to be filled here	Not to be filled here
7.2.2	Equipping of shaft below 0 mRL	50	t	Not to be filled here	Not to be filled here
	Total Amount			Not to be filled here	Not to be filled here

8. LOWERING ERECTION AND INSTALLATION OF ELECTRICAL EQUIPMENT, FITTINGS & TOOLS REQUIRED AT SERVICE SHAFT

(Lowering, installation of cable by properly securing on good wooden blocks, clamps, wall brackets etc. in the shaft and levels of cable from surface to (-) 180 mRL sub-stations, installation of 3.3 KV breaker panel at surface, 0 mRL, installation of 3.3 KV, VCB with complete panels at 0 mRL and installation and commissioning of sub-stations at (-) 180 mRL having the following items:

Sl	Description of Schedule Item	04	T I •4	Unit Rate	Amount
No.		Qty	Unit	(in `)	(in `)
8.1	HT Cu Cable, 3.3 KV, Double armoured, Cu, 300 mm ² [from surface to (-) 180 mRL] in shaft with looping in 180 mRL and 0 mRL old substations.	1600	m	Not to be filled here	Not to be filled here
8.2	HT cable 3.3 KV, Cu, D/A, 150 mm ² (Copper)	700	m	Not to be filled here	Not to be filled here
8.3	3.3 KV VCB complete with panels at surface	1	No.	Not to be filled here	Not to be filled here
8.4	3.3 KV, VCB complete with panels at 0 mRL	3	No.	Not to be filled here	Not to be filled here
8.5	3.3 KV, 630 Amp, HT Isolator at 0 mRL	1	LS	Not to be filled here	Not to be filled here
8.6	For Sub-station at (-) 180 mRL	1	•	•	
8.6.1	3.3KV, VCB with complete panels	4	No.	Not to be filled here	Not to be filled here
8.6.2	3.3 KV, 630 Amp, HT Isolator	1	LS	Not to be filled here	Not to be filled here
8.6.3	Transformer 3.3 KV/ 440 V, 500 KVA complete with NGR	4	No.	Not to be filled here	Not to be filled here
8.6.4	LT ACB 800 Amp, Complete panel	3	No.	Not to be filled here	Not to be filled here
8.6.5	LT ACB 600 Amp, Complete panel	6	No.	Not to be filled here	Not to be filled here

0.5.5				Not to be	Not to be filled
8.6.6	LT ACB 400 Amp, Complete panel	4	No.	filled here	here
8.6.7		4	No.	Not to be filled here	Not to be filled here
0.0.7	LT ACB 200 Amp, Complete panel	7	140.		
0.60	LT Distribution board 400 Amp/ 08 outlet (01		NIa	Not to be	Not to be filled
8.6.8	for each level)	6	No.	filled here	here
0.60		1 000		Not to be	Not to be filled
8.6.9	LT cable 1.1 KV, Cu, D/A, 240 mm ² (Copper)	1,000	m	filled here	here
	Cash.			Not to be	Not to be filled
8.6.10	Lighting trans. for each level.	6	No.	filled here	here
	Lighting trails. for each level.			Not to be	Not to be filled
8.6.11	Tuba Liaht Sutura 20 matt	500	No.	filled here	here
	Tube Light fixture, 20 watt			Not to be	Not to be filled
8.6.12	Lighting Cable 6mm ² , 02 core, Cu, Double	2000	m	filled here	here
0 (12	Armoured,				
8.6.13	LT cables (Copper)			Not to be	Not to be filled
8.6.13.1		500	m	filled here	here
	35 mm ²			Not to be	Not to be filled
8.6.13.2		500	m	filled here	here
	50 mm ²			NT I	N
8.6.13.3		500	m	Not to be filled here	Not to be filled here
0.0.10.0	70 mm^2				
	Erection, installation and commissioning of new			Not to be filled here	Not to be filled here
8.6.14	PLC system with interlocking, cabling, programming and interfacing etc. with service	1	LS	inica nere	nere
0.0.1	shaft winder and reconfiguration, modification of	1	25		
	existing DC Drive and PLC system			27	
8.6.15	Erection, installation and commissioning of			Not to be filled here	Not to be filled here
	Signaling and shaft interlocking system complete at each level for Service Shaft with provision of			inica nere	noic
	control panels and indications at each level and	1	LS		
	including supply of control cables for interfacing				
	top level with all other levels and including kep				
8.6.16	lock, gate lock and kep & gate limit switches, etc Erection, installation and commissioning of			Not to be	Not to be filled
	Pump with motor and electrical suitable for 250			filled here	here
	m head capable of delivering 250 gpm with	2	no		
	complete electrical switchgers and starter and control cables.				
	Control Cables.			Not to be	Not to be filled
	Total Amount			filled here	here
L	TOTAL AMOUNT]			

9. LOWERING, ERECTION AND COMMISSIONING OF ELECTRICAL EQUIPMENT, FITTINGS & TOOLS REQUIRED AT PRODUCTION SHAFT

Lowering, installation of cable by properly securing on good wooden blocks, clamps, wall brackets etc. in the shaft and installation and commissioning of sub-stations at -180 m RL.

Sl	Description of Schedule Item	Otre	Unit	Unit Rate	Amount
No.]	Qty	Unit	(in `)	(in `)
	Substation at (-) 180 m RL		I.	1	1
9.1	Transformer, 3.3KV / 440V, 500 KVA Complete with NGR	2	No.	Not to be filled here	Not to be filled here
9.2	VCB, 3.3 KV with complete panel and protection.	8	No.	Not to be filled here	Not to be filled here
9.3	3.3 KV , 630 Amp, HT Isolator at 0 mRL & -180 mRL	4	LS	Not to be filled here	Not to be filled here
9.4	LT breaker, Complete with panel.	12	No.	Not to be filled here	Not to be filled here
9.5	HT cable, 70 mm ² , Cu, 3.3 KV (Copper)	200	m	Not to be filled here	Not to be filled here
9.6	Control cable, 7 core (Copper)	1000	m	Not to be filled here	Not to be filled here
9.7	LT cable (All copper cables)			Not to be filled here	Not to be filled here
9.7.1	35 mm ²	500	m	Not to be filled here	Not to be filled here
9.7.2	50 mm ²	250	m	Not to be filled here	Not to be filled here
9.7.3	70 mm ²	250	m	Not to be filled here	Not to be filled here
9.7.4	95 mm ²	500	m	Not to be filled here	Not to be filled here
9.8	LT Control Panel	1	No.	Not to be filled here	Not to be filled here
9.9	HT cable 3.3 KV, Cu, D/A, 150 mm ² (Copper)	3,000	m	Not to be filled here	Not to be filled here
9.10	(A)HT Breaker,3.3.KV VCB Complete with pannel at surface under equipping of Prod shaft	1	No.	Not to be filled here	Not to be filled here
9.11	(B)Control cable copper LT 1.1KV grade PVC,30 corex 2.5sqmm insulated double armoured, Mining Type	2000	m	Not to be filled here	Not to be filled here

9.12	Reconfiguration, modification of existing DC Drive and PLC system along with erection, installation and commissioning of necessary equipments related to power and control circuits.	1	LS	Not to be filled here	Not to be filled here
9.13	Laying and commisioning of Looping of DC cables for generators	200	m	Not to be filled here	Not to be filled here
9.14	Complete operator control desk replacement with necessary mechanical interlocking with braking system SCADA system and depth indicator	1	LS	Not to be filled here	Not to be filled here
9.15	LT Distribution board 400 Amp/ 08 outlet	1	No.	Not to be filled here	Not to be filled here
9.16	Erection, installation and commissioning of Signaling and shaft interlocking system complete at each level for Production Shaft with provision of control panels and indications at each level and including supply of control cables for interfacing top level with all other levels.	1	LS	Not to be filled here	Not to be filled here
9.17	Erection, installation and commissioning of PLC system and control desk with interlocking, cabling, programming and interfacing etc. with Ore Hoisting and Ore Crushing System with Production Shaft Winder	1	LS	Not to be filled here	Not to be filled here
	Total Amount			Not to be filled here	Not to be filled here

The cable installation will include lowering, installation of cable by properly securing on good wooden blocks, clamps, wall brackets etc. in the shaft and sub-stations.

Lighting transformer and tubelight fixing/CFL will be different sub-stations and other locations like crusher chamber, bins, control room etc.

The cable installation will include lowering, installation of cable by properly securing on good wooden blocks, clamps, wall brackets etc. in the shaft and sub-stations.

Lighting transformer and tubelight fixing/CFL will be different sub-stations and other locations like crusher chamber, bins, control room etc.

10. LOWERING, ERECTION AND COMMISSIONING OF WINDING FACIITIES, CRUSHER AN ORE HANDLING SYSTEM HAVING THE FOLLOWING MAIN COMPONENTS:

		Otra	Unit	Unit Rate	Amount
Sl No.	Description of Schedule Item	Qty	Omt	(in `)	(in `)
10.1	Winding ropes for extension of winding arrangements of both shafts, service shaft up to (-) 196 & production shaft up to (-) 226 mRL, tail rope including cuba winch ropes, complete signaling system with shaft interlocking, rigid and rope guides, tension arrangement in rope guides, signaling system at each level for Service Shaft and Production shaft, suspension gears etc and all other required for mine shafts as per approved design.	1	LS	Not to be filled here	Not to be filled here
10.2	Ore handling system				
10.3	Jaw crusher of 500 tonne per hour with motors, cable, switch gear, guards and other components including laying of cable from sub-station.	1	No.	Not to be filled here	Not to be filled here
10.4	Vibratory feeder of 500 tph capacity complete with drive mechanism motor and switch gear. (Below Ore Pass and below ROM Bin)	2	No.	Not to be filled here	Not to be filled here
10.5	Vibratory feeder of 500 tph capacity complete with drive mechanism motor and switch gear. (Below Ore bin and below waste bin)	2	No.	Not to be filled here	Not to be filled here
10.6	Disc Screen complete with drive mechanism	1	No.	Not to be filled here	Not to be filled here
10.7	EoT Crane of 30 tonne capacity including installation of rail, brackets, support, power supply from distribution panel	1	No.	Not to be filled here	Not to be filled here
10.8	Complete belt conveyor system of 500 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums, conveyor transfer chute and other attachments. including laying of cable from distribution panel	200	m	Not to be filled here	Not to be filled here
10.9	Complete belt conveyor system of 500 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums and other attachments. including laying of cable from distribution panel	340	m	Not to be filled here	Not to be filled here
10.10	Complete belt conveyor system(below crusher) of 500 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums, conveyor transfer chute and other attachments . including laying of cable from distribution panel	20	m	Not to be filled here	Not to be filled here

10.11	Complete belt conveyor system (below surge bin) of 350 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums and other attachments . including laying of cable from distribution panel	25	m	Not to be filled here	Not to be filled here
10.12	Complete belt conveyor system (at (-)152 mRL of 500 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums and other attachments . including laying of cable from distribution panel	10	m	Not to be filled here	Not to be filled here
10.13	Complete belt conveyor system (at (-)180 mRL of 500 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums and other attachments . including laying of cable from distribution panel	15	m	Not to be filled here	Not to be filled here
10.14	Measuring Hoppers at loading point including load cells and all accessories	2	No	Not to be filled here	Not to be filled here
10.15	PLC System	1	No	Not to be filled here	Not to be filled here
10.16	Spillage handling system at shaft bottom including lowering and fixing of spillage receiving hopper, chute, chute operating mechanism, arrangement for cuba bucket loading and unloading in to skip.	1	no	Not to be filled here	Not to be filled here
10.17	Dismantling of BGML shaft winder and installation at -180 m RL for spillage reclamation	1	no	Not to be filled here	Not to be filled here
10.18	Belt Conveyor at surface for waste hoisting: Complete belt conveyor system of 500 tph capacity having fire resistant conveyor of 1000 mm width with steel structure, idlers, impact rollers, drive mechanism motor, gears, drums, conveyor transfer chute and other attachments . including laying of cable from distribution panel at surface	50	m	Not to be filled here	Not to be filled here
	Total Amount			Not to be filled here	Not to be filled here

11.GROUND SUPPORT AND MISCELLENIOUS ITEMS AS AND WHEN REQUIRED

SI	Description of Schedule Item	Qty	Unit	Unit Rate	Amount
No.				(in `)	(in `)
11.1	Steel support including procurement, fabrication, transport and install at drive/cross cuts/other excavation area	20	t	Not to be filled here	Not to be filled here

11.2	Installation of Rock Bolt of 20 mm torsteel including drillin thickness, 150mm x 150mm, 6" threaded nut of	g, grouting	with cemen	t with bearing p	late of 6 mm
11.2.1	1.5 m length	1,000	No.	Not to be filled here	Not to be filled here
11.2.2	1.8 m length	500	No.	Not to be filled here	Not to be filled here
11.2.3	2.5 m length	300	No.	Not to be filled here	Not to be filled here
11.3	Procurement and installation of inter woven wiremesh/chainlink of 50mm 3mm wire thickness with shotcrete or rock bolts excluding cost of shot-creting and rock bolts.	3,000	Sq.m	Not to be filled here	Not to be filled here
11.4	Shotcreting 100 mm thickness	100	Sq. m	Not to be filled here	Not to be filled here
11.5	Shotcreting 50 mm thickness	1,000	Sq. m	Not to be filled here	Not to be filled here
11.6	RCC of M-25 grade nominal with1:1:2 ratio (1 cement : 1 coarse sand : 2 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed)	100	cum	Not to be filled here	Not to be filled here
11.7	RCC M 20 grade nominal (1: 1.5:3) ratio (1 cement : 1.5 coarse sand : 3 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed)	100	cum	Not to be filled here	Not to be filled here
11.8	PCC of M-15 grade with 1:2:4 ratio (1 cement : 2 coarse sand : 4 graded stone aggregate using, 20 mm and 12.5 mm down screened and washed)—as specified above	100	cum	Not to be filled here	Not to be filled here
11.9	Long hole (57 mm dia) drilling	2500	m	Not to be filled here	Not to be filled here
11.10	Cement for consolidation	4480	50Kg bag	Not to be filled here	Not to be filled here
11.11	Cable bolting of 20 mm thickness wirerope of varying length from 8m to 15m including supply of cable, resin or cement, chemical, drilling hole & insertion of cable	2000	m	Not to be filled here	Not to be filled here
11.12	Miscellaneous excavations	500	cum	Not to be filled here	Not to be filled here
	Total Amount			Not to be filled here	Not to be filled here

12. DESIGN AND DETAILED ENGINEERING

(Quoted amount shall be limited to maximum of 3% of total of 1to~10 above and total of 12,~13~&~14. Supplies)

Sl. no	Description	O4**	Unit	Unit Rate	Amount
		Qty	Unit	(in `)	(in `)
	Design of shaft deepening of existing service shaft			Not to be	Not to be filled
12.1	and production shaft			filled here	here
	a) General arrangement			Not to be	Not to be filled
12.1.1	-			filled here	here
	b) Equipment layout at various levels			Not to be	Not to be filled
12.1.2				filled here	here
	c) Shaft lining with necessary design calculations			Not to be	Not to be filled
12.1.3				filled here	here
	Design & drawing of crusher chamber, ROM bin,			Not to be	Not to be filled
12.1.4	spillage reclamation winze, surge bin, loading stations and other related excavations.			filled here	here
	Design & drawings for auxiliary shaft winder, pulley			Not to be	Not to be filled
12.1.5	chamber, loading and unloading arrangement,			filled here	here
	structural arrangement in shaft including guide rail etc. at (-)180 mRL and (-) 226 m RL.				
12.2	Design for rock breaker installation, foundation,			Not to be filled here	Not to be filled
12.2	cabin, grizzley blocks etc.			illied here	here
	Design for insets and horizontal level development			Not to be	Not to be filled
12.3	including track layout, pipe line layout, RCC,PCC etc.			filled here	here
	Detailed design for shaft furnishing such as bunton &			Not to be	Not to be filled
12.4	guide arrangement in shaft for skip in production shaft & cage in service shaft			filled here	here
10.5	Detailed design for pipes & cables fittings in the			Not to be	Not to be filled
12.5	shaft			filled here	here
10.6	Detailed design for inset structures and all structural			Not to be	Not to be filled
12.6	arrangement as per requirement.			filled here	here
	Detailed design for skip loading system including			Not to be	Not to be filled
12.7	receiving bins, crusher, Disc screen/Ross Grizzly,			filled here	here
	feeder, measuring hoppers, transfer car, conveyor arrangement including conveyor transfer chute, etc.				
	Detailed design for shaft fencing, gates, platform			Not to be	Not to be filled
12.8	arrangement for entry of persons into cage, etc.			filled here	here
46.0	Detailed design for skip unloading arrangement			Not to be	Not to be filled
12.9	including skip gate opening system			filled here	here

12.10	Detailed design calculation for cage rope and skip rope and suitable drawings of cage with new rope and skip with new rope.	Not to be filled here	Not to be filled here
12.11	Electrical drawings including single line diagram	Not to be filled here	Not to be filled here
12.12	Various control panels, power panels and drawings	Not to be filled here	Not to be filled here
12.13	Equipment / structural foundation drawings	Not to be filled here	Not to be filled here
12.14	As-built drawings of the plant as constructed.	Not to be filled here	Not to be filled here
		Not to be filled here	Not to be filled
	Total Amount	illied nere	here

SUPPLIES:

- The supply will include 3 copies of operation and maintenance manuals, spare parts catalogue. Length of ropes will be calculated by the bidders and specified in appropriate column 1.
- 2.

13. SUPPLY OF ELECTRICAL EQUIPMENT, FITTINGS & TOOLS REQUIRED AT SERVICE SHAFT

Sl No.	Description of Material	Otr		Unit Rate	Amount
		Qty	Unit	(in `)	(in `)
				Not to be	Not to be filled
13.1	HT Cu Cable, 3 core, insulation PVC/XLPE, 3.3 KV, Double armoured, Mining type, Cu, 300 mm ²	1600	m	filled here	here
				Not to be	Not to be filled
13.2	HT cable 3.3 KV, Cu, 3 core, Insulation PVC/XLPE D/A Mining type, 150 mm ² (Copper)	700	m	filled here	here
				Not to be	Not to be filled
13.3	3.3 KV, 630 Amp VCB breaker complete with panel at surface	1	No.	filled here	here
				Not to be	Not to be filled
13.4	3.3 KV, 630 Amp VCB with complete panels at 0 mRL	3	No.	filled here	here
				Not to be	Not to be filled
13.5	3.3 KV, 630 Amp, HT Isolator at 0 mRL	1	LS	filled here	here
13.6	For Sub-station at (-) 180 mRL				
				Not to be	Not to be filled
13.7	3.3KV, 630 Amp VCB with complete panels	4	No.	filled here	here
				Not to be	Not to be filled
13.8	3.3 KV, 630 Amp, HT Isolator	1	LS	filled here	here
				Not to be	Not to be filled
13.9	Transformer 3.3 KV/ 440 V, 500 KVA complete with NGR	4	No.	filled here	here
13.10	LT ACB 800 Amp, Complete switch board panel with common Cu bus bar.	3	No.	Not to be	Not to be filled

				filled here	here
13.11	LT ACB 600 Amp, Complete switch board panel with common Cu bus bar.	6	No.	Not to be filled here	Not to be filled here
13.12	LT ACB 400 Amp, Complete switch board panel with common Cu bus bar.	4	No.	Not to be filled here	Not to be filled here
13.13	LT ACB 200 Amp, Complete switch board panel with common Cu bus bar.	4	No.	Not to be filled here	Not to be filled here
13.14	LT Distribution board 400 Amp/ TPN SFU & 08 nos. outgoing of 200 amp, 100 amp, 63 amp & 32 amp	6	No.	Not to be filled here	Not to be filled here
13.15	LT cable 1.1 KV, Cu, $3^{1}/_{2}$ core, Insulation PVC/XLPE D/A Mining type, D/A, 240 mm ² (Copper)	1,000	m	Not to be filled here	Not to be filled here
13.16	Lighting trans. for each level (10 KVA, 440/110V)	6	No.	Not to be filled here	Not to be filled here
13.17	Tube Light fixture, 20 watt	500	No.	Not to be filled here	Not to be filled here
13.18	Lighting Cable 6mm ² , 02 core, Cu, Double Armoured,	2000	m	Not to be filled here	Not to be filled here
13.19	LT cables (Copper) 3 core, Insulation PVC/XLPE D/A Mining	type		_	
13.19.1	35 mm ²	500	m	Not to be filled here	Not to be filled here
13.19.2	50 mm^2	500	m	Not to be filled here	Not to be filled here
13.19.3	70 mm^2	500	m	Not to be filled here	Not to be filled here
13.20.	Supply of necessary euipments, control transformers, electronic cards, software for capacity enhancement of existing DC Drive & PLC system including reconfiguration and modification of the existing system at service shaft winder and retrofitting of PLC system for repliceing existing relay logic safety circuit having latest configuration including all control cables and relay boards for inputs and outputs, software, computer system and online UPS with batteries, SCADA, communication cables, auxiliary relays and contactors, control transformers, SMPS, indications and push buttons and any other related accessories, etc.	1	LS	Not to be filled here	Not to be filled here

	Supply of Signaling and shaft interlocking system			Not to be	Not to be filled
	complete at each level for Service Shaft with			filled here	here
	provision of control panels and indications at each				
13.21	level and including supply of control cables for	1	LS		
	interfacing top level with all other levels and				
	including kep lock, gate lock and kep & gate limit				
	switches, etc				
	Supply of Pump with motor and electrical suitable			Not to be	Not to be filled
12.22	for 250 m head capable of delivering 250 gpm		NIa	filled here	here
13.22	with complete electrical switchgers and starter	2	No.		
	and control cables.				
				Not to be	Not to be filled
				filled here	here
	Total Amount				

14. SUPPLY OF ELECTRICAL EQUIPMENT, FITTINGS & TOOLS REQUIRED AT PRODUCTION SHAFT

Sl	Description of item	0.4	TT *4	Unit Rate	Amount
No.		Qty Uni	Unit	(in `)	(in `)
	Substation at (-) 180 mRL	1		•	
14.1	Transformer, 3.3KV / 440V,500 KVA Complete with NGR	2	No.	Not to be filled here	Not to be filled here
14.2	VCB, 3.3 KV with complete panel and protection.	8	No.	Not to be filled here	Not to be filled here
14.3	3.3 KV , 630 Amp, HT Isolator at 0 mRL & -180 mRL	4	LS	Not to be filled here	Not to be filled here
14.4	LT breaker, Complete with panel, common Cu bus bar, Incommer: 800 amp - 3nos, Outgoings: 600 amp - 2 nos, 400 amp - 04 nos, 200 amp - 4 nos.	12	No.	Not to be filled here	Not to be filled here
14.5	HT cable, 70 mm ² , Cu, 3.3 KV (Copper), 3core, Insulation PVC/XLPE D/A Mining type,	200	m	Not to be filled here	Not to be filled here
14.6	Control cable, 7 core (Copper), LT 1.1 KV PVC armourd, Mining type 7C x 1.5 mm ² copper control cable	1,000	m	Not to be filled here	Not to be filled here
14.7	LT cable (1.1 K.V Grade, 3 core, PVC / XLPE D/A, Mining type Cu)			Not to be filled here	Not to be filled here
14.7.1	35 mm ²	500	m	Not to be filled here	Not to be filled here
14.7.2	50 mm ²	250	m	Not to be filled here	Not to be filled here
14.7.3	70 mm ²	250	m	Not to be filled here	Not to be filled here
14.7.4	95 mm ²	500	m	Not to be filled here	Not to be filled here

14.8	Complete MCC, LT Control panel with Incomers: 3 nos - 800 amp ACBs, Outgoings: 400 amp - 2 nos, 250 amp - 2 nos & 100 amps - 4 nos.	1	No.	Not to be filled here	Not to be filled here
14.9	HT cable 3.3 KV, Cu, 3 core, Insulation PVC/XLPE D/A Mining type, 150 mm ² (Copper)	3,000	m	Not to be filled here	Not to be filled here
14.10	(A)HT Breaker, 3.3.KV 630 Amp VCB Complete with pannel at surface under equipping of Production shaft	1	No.	Not to be filled here	Not to be filled here
14.11	(B)Control cable for interfacing production shaft winder with -180 mRL hoisting and crushing station PLC and loading station. Cable copper LT 1.1KV grade PVC,30 corex 2.5sqmm insulated double armoured, Mining Type	2000	m	Not to be filled here	Not to be filled here
14.12	Supply of necessary euipments, control transformers, electronic cards, software for capacity enhancement of existing DC Drive & PLC system including reconfiguration and modification of the existing system.	1	LS	Not to be filled here	Not to be filled here
14.13	Looping of DC Cables for generators PVC flexible single core 400 sq mm tinned coated copper conductor	200	m	Not to be filled here	Not to be filled here
14.14	Complete operator control desk replacement with necessary mechanical interlocking with braking system SCADA system and depth indicator	1	LS	Not to be filled here	Not to be filled here
14.15	LT Distribution board 400 Amp/ 08 outlet	1	No.	Not to be filled here	Not to be filled here
14.16	Supply of Signaling and shaft interlocking system complete at each level for Production Shaft with provision of control panels and indications at each level and including supply of control cables for interfacing top level with all other levels.	1	LS	Not to be filled here	Not to be filled here
14.17	Supply of Programmable Logic Controller (PLC) System of latest configuration (ABB/ Siemens/ Schenieder/Allen Bradley make only) including all control cables and relay boards for inputs and outputs, software, computer system and online UPS with batteries, SCADA, communication cables, auxiliary relays and contactors, control transformers, SMPS, control desk with MIMIC diagram and indications and push buttons and any other related accessories, etc. This PLC will be used for Ore Crushing and Hoisting System.	1	LS	Not to be filled here	Not to be filled here
	Total amount			Not to be filled here	Not to be filled here

15. SUPPLY OF WINDERS, WINDER ROPES, CRUSHER AND ORE HANDLING SYSTEM:

Sl No.	Description of Material	O4	Oty Unit	Unit Rate	Amount
		Qty	UIII	(in `)	(in `)
15.1	Winder at service winze with Single drum 2.5m drum dia with open gear box of 240Kw motor and electronic control drive panel with other installations along with man winding facility. (Depreciated Cost after completion of the job)		LS	Not to be filled here	Not to be filled here
15.2	Winder at BGML shaft with Single drum 2.2m drum dia with open gear box of 90Kw motor and electronic control drive panel with other installations along with man winding facility. (Depreciated Cost after completion of the job)		LS	Not to be filled here	Not to be filled here
15.3	Skips for production shaft of existing specifications	2	no	Not to be filled here	Not to be filled here
15.4	Double deck cage for service shaft	1	no	Not to be filled here	Not to be filled here
15.5	Winding rope for skips	4140	m	Not to be filled here	Not to be filled here
15.6	Tail rope for skips	1380	m	Not to be filled here	Not to be filled here
15.7	Guide rope for production shaft	5520	m	Not to be filled here	Not to be filled here
15.8	Service winding ropes	1700	m	Not to be filled here	Not to be filled here
15.9	Rope for cuba winch	730	m	Not to be filled here	Not to be filled here
15.10	Guide rope for cuba winch (32 mm)	1460	m	Not to be filled here	Not to be filled here
15.11	Swivel type Suspension Gears with complete attachment for skips	12	no	Not to be filled here	Not to be filled here
15.12	Suspension Gears with complete attachment for Cage	2	no	Not to be filled here	Not to be filled here
15.13	Tail rope attachment with skips	2	no	Not to be filled here	Not to be filled here
15.14	Ore handling system as per design				

15.14.1	Jaw crusher of 500 tonne per hour with motor (Crusher of Sandvik, Metso, Krupp, L&T make and motor of ABB, Siemens, Crompton & Greaves, GE, EE, BHEL and Integrated electric Co only)	1	No.	Not to be filled here	Not to be filled here
15.14.2	Vibratory Feeders of 500 tph capacity complete with drive mechanism, motor and switch gear	4	Nos	Not to be filled here	Not to be filled here
15.14.3	Disc Screen complete with drive mechanism		Nos	Not to be filled here	Not to be filled here
15.14.4	EoT Crane of 30 tonne capacity	1	No.	Not to be filled here	Not to be filled here
15.14.5	Measuring Hoppers at loading point including load cells and all accessories	2	No.	Not to be filled here	Not to be filled here
15.15	BELT CONVEYOR SYSTEM OF 500 tph CAPACITY	AT UNDEI	RGROUND)	
15.15.1	Fire resistant conveyor of 1000 mm	1150	m	Not to be filled here	Not to be filled here
15.15.2	Complete set of idlers with mounting frame suitable for 1000 mm conveyor	600	no	Not to be filled here	Not to be filled here
15.15.3	Horizontal rollers for 1000 mm conveyor	600	no	Not to be filled here	Not to be filled here
15.15.4	Drums/pulleys suitable for the system	12	no	Not to be filled here	Not to be filled here
15.16	Spillage handling system at shaft bottom including receiving hopper, chute, chute operating mechanism including loading and unloading arrangement.	1	no	Not to be filled here	Not to be filled here
15.17	Supply, Lowering, installing and commissioning of Rock Breaker including all electrical item	2	no	Not to be filled here	Not to be filled here
15.18	Supply, lowering, fabrication, transportation to site and erection of grizzly (8m x8m) with 800mm x800mm opening	103	МТ	Not to be filled here	Not to be filled here
15.19	Belt conveyor system at surface				
15.19.1	Fire resistant conveyor of 1000 mm	100	m	Not to be filled here	Not to be filled here
15.19.2	Complete set of idlers with mounting frame suitable for 1000 mm conveyor	50	no	Not to be filled here	Not to be filled here
15.19.3	Horizontal rollers for 1000 mm conveyor	50	no	Not to be filled here	Not to be filled here
15.19.4	Drums/pulleys suitable for the system	2	no	Not to be filled here	Not to be filled here

15.20	Supply, lowering, fabrication, transportation to site and erection of grizzly (3m x3m) with 300mm x300mm opening at 0 ML,(-)60 ML and (-)120 ML waste pass	43	МТ	Not to be filled here	Not to be filled here
				Not to be	Not to be filled
				filled here	here
	Total Amount				

Quoted rates should be in figures. Standing of L-1 bidder shall be decided based on overall L-1 value of combined work as per scope of work.

** The above rate will be exclusive of Goods and Services Tax (GST), Royalty, DMF and NMET. Applicable GST shall be payable by the successful bidder as per clause 8.9 a) and 8.9 b).

(Signature of the Authorized signatory)
(Name and designation of the of the Authorized signatory)

Name and seal of Bidder

SECTION II

CONTRACT

BETWEEN

HINDUSTAN COPPER LIMITED

AND

[Please Insert the name of the Contractor]

(CONTRACTOR)

FOR

[Please insert the name of the work]

BETWEEN:

HINDUSTAN COPPER LIMITED, a company incorporated under the Indian Companies Act 1956 (hereinafter referred to either as the "**Employer** or **HCL**" which expression shall include its successors and permitted assigns) having its registered office at 1, Ashutosh Chowdhury Avenue, Kolkata – 700019 India of the **FIRST PART**:

AND

[Please Insert the Name of the Contractor], a company incorporated under the provisions of the Indian Companies Act, 1956, having its registered office at [Please Insert the Address of the Contractor] or, in case of a Consortium, [please insert the details of the consortium members], who have, vide a power of attorney, duly authorized [Please Insert the Name of the Contractor], a company incorporated under the provisions of the Indian Companies Act, 1956, having its registered office at [Please Insert the Address of the Contractor], to execute this Contract for and on their behalf collectively, hereinafter referred to as the "Selected Bidder or Contractor" (which expression shall unless repugnant to the subject or the context include its successors and permitted assigns) of the OTHER PART.

WHEREAS:

- (A) HCL is a public sector undertaking under the administrative control of the Ministry of Mines.
- (B) For undertaking the Work (as defined hereinafter), the Employer has conducted a competitive bidding process for inviting tenders from eligible parties. HCL, after evaluating the tender submitted by the parties, selected [Please Insert the details of the Selected Bidder] or Consortium comprising [Please insert the details of the consortium members] ("Contractor") and issued a Letter of Intent ("LoI") for the Work which was duly accepted by the Selected Bidder.

- (C) The Contractor has represented that it has the experience, expertise, capability and know-how to ensure that the Works are executed and completed in accordance with the terms of the Contract in a safe and environmentally responsible manner and that the Works will be capable of seamless integration with Related Works and be carried out on, under and over the Work Site (as defined hereinafter).
- (D) Relying upon the representations
- in Recital C, the Employer appoints the Contractor for execution of the Work, and the Contractor agrees to carry out and complete the Works and remedy any defects therein, on the terms and conditions of the Contract.
- (E) The Contractor acknowledges that the Employer has entered into or will enter into other contracts with other contractors and/or parties for elements of the Work (as defined hereinafter) (and not comprised in the Works) and that the Employer will have Related Works performed and that it is of paramount importance that the Works are fully and completely co-ordinated with the Related Works in view of their concurrent and sequential nature.
- (F) This Contract has been executed and delivered in accordance with the laws of India.
- (G) The terms and conditions of this Contract have been fully negotiated between the Employer and the Contractor as parties of competent capacity and equal standing.

NOW THEREFORE in reliance of the mutual covenants and agreements, HCL is desirous of regulating its relationship with the Contractor in accordance with and subject to the terms hereof and in the manner set forth herein.

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

SECTION-II

ARTICLE - 1

DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Contract or any documents either issued or that may be issued in connection with this Contract, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

- "Applicable Laws" means all laws in force and effect as of the date hereof and which may be promulgated or brought into force and effect hereinafter in India including any revisions, amendments or re-enactments including without limitation, the Mines Act, 1952, The Mines Rules, 1955, Mines and Minerals (Development and Regulations) Act, the Metalliferous Mines Regulations, 1961, Minimum Wages Act, and Workmen Compensation Act, PF Act including any rules, regulations and notifications made there under and judgments, decrees, injunctions, writs, orders and notifications issued by any court of record or any appropriate authorities, as may be in force and effect during the subsistence of the Contract.
- "Applicable Permits" means any clearance, permit, authorization, consent, license, lease, ruling, exemption, filing, agreements, or approval, required to be obtained and maintained by the Employer and/or the Contractor from time to time, in order to implement the Work and/or to design and execute the Works in accordance with this Contract.
- "Appointed Date" means the date of issue of Letter of Intent (LoI).
- "Approved" shall mean approved in writing including subsequent written confirmation of previous verbal approval.
- "Bidder" means Bidding Company or Bidding Consortium, as defined below.

Bidding Company: If the bid is made by a single corporate entity.

Bidding Consortium: If the bid is made jointly by corporate entities with suitable consortium agreement amongst them.

- **"Bid Security"** shall mean the bid security as furnished by the Contractor in response to the tender in the format attached at Appendix III.
- "Business Day" means a day other than a Sunday or a public holiday on which scheduled commercial banks are open for business in Rajasthan, India.
- "Change in Law" means (i) any enactment or issuance of any new Applicable Law; (ii) any change in the interpretation or Tender of an existing Applicable Law by any Government Agency having direct authority for such interpretation or Tender; (iii) any amendment, alteration or modification of an existing Applicable Law by any Government Agency having direct authority for the enactment, enforcement or interpretation, thereof; or (iv) the repeal and re-enactment of any existing Applicable Law.

- "Commencement Date" shall mean the date falling on the expiry of the mobilisation period of 4 months (120 days) from the date of issue of LoI.
- "Company" means Hindustan Copper Limited (HCL) having its registered office at 1, Ashutosh Choudhury Avenue, Kolkata 700 019, West Bengal, including its successor and assignees or its representatives. Company shall also mean the owner wherever the context so requires.
- "Completion" means the completion of the entire scope of Work herein specified to the required standards accordance with this Contract to the satisfaction of the Engineer-in-Charge, and the terms "Complete" "Completed" "Completion" and "Completing" shall be construed accordingly.
- "Completion Certificate" means the certificate to be issued by the Engineer-in-Charge in accordance with provision of Article 6.4 certifying Completion of the awarded Work
- "Confidential Information" means the Contract and everything contained therein, all documentation, data, particulars of the Works and technical and/ or commercial information made by (or on behalf of) the Employer or obtained directly or indirectly from the Employer or the Employer's Representative by the Contractor or which is generated by the Contractor or any information or data that the Contractor receives or has access to as a result of the Contract, other than information which is generally available in the public domain other than by any unauthorized actions or fault of the Contractor; or which is in the possession of the Contractor with a right to disclose.

"Consortium"	means the consortium	consisting of	members only as	s mentioned below.	The consortium
consists of (i) _		and (ii)		formed/ ac	cting pursuant to
the joint bidding	g agreement dated	·			

- "Contract" means the agreement to be entered into between HCL and the successful bidder, as recorded in the Contract Form signed by the parties, including all annexure thereto and all documents incorporated by reference therein.
- "Contract Agreement" means the written agreement, which the contractor shall enter into the company, pursuant to the acceptance of the Tender.
- "Contractor's Documents" means those documents to be prepared by the Contractor under the Contract including without limitation, such data, Drawings, designs, design information, descriptions, calculations, schedules, specifications, plans, samples, patterns, models, mock-ups, computer software drawings, inspection and test plans, manuals, programmes, erection and test data and all other information and documents including all eye readable or computer/other machine readable data relating to the design (to the extent required under the Contract) for execution of the Works or otherwise for the performance of the Contract.
- "Contract Period" means the period of Contract 60(sixty) months or completion of the contractual quantity, whichever is earlier, including 120 days of mobilization period.
- "Contract Price" shall have the meaning ascribed in the applicable clauses in the tender.

- "Contract Payment Due Date" means credit period of 30 days from the receipt of the bill for the month of completion of the job, after deduction of LD, if any.
- "Contract Payment Period" means the period within which, payment is to be made by HCL to the Contractor for the actual work done by the Contractor during the month for which payment is sought.
- "Contractual Quantity" means the quantity for which contract has been entered into.
- "Contract value" means total value of the contract on date of agreement and not of date of bidding.
- "Day" means the twenty four hours period ending at 24.00 midnight (Indian Standard Time).
- "DGMS" means Directorate General of Mines Safety, Government of India.
- "Dispute" shall have the meaning ascribed thereto in applicable clauses in the tender.
- "**Drawings**" shall include maps, plans, sections, and tracings or prints thereof with any modifications approved in writing by the Engineer-in-charge and such other drawings as may, from time to time, be furnished or approved in writing by the Engineer-in-charge during the currency of the contract.
- "Emergency" means a condition or situation that is likely to endanger the Mine safety as per Good Industry Practice on or about the Work Site/Work Facilities including safety of users thereof or which poses an immediate threat of material damage to any of the Work Site/Work Facilities.
- **"Emergency Works"** shall mean and include all such works necessary to be undertaken to prevent the occurrence/ happening/ further deterioration/ damage/ disaster/ accident/ incident anticipated by the Engineer-in-Charge that could seriously affect the safety of persons/production of Mine or part thereof.
- "Encumbrance" means any encumbrance such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Work, physical encumbrances and encroachments on the Work Site/Work Facilities.
- "Engineer-in-Charge/HCL's Representative" shall mean such officer or officers having such rights and obligations set out in **Schedule I**, to be designated, deputed or authorized, by HCL for the purpose of this Contract and shall include Engineer-in-Charge's authorized representatives.
- "Event of Default" shall have the meaning ascribed thereto in applicable clauses in the tender.
- "Final Certificate" in relation to a work means the certificate issued by Engineer-in-Charge after the period of liability is over.
- "Force Majeure Event" shall have the meaning ascribed thereto in Article 9.
- **"Force Majeure Period"** means, as determined by the Engineer-in-Charge, the period commencing from the date of occurrence of a Force Majeure Event and ending on (i) the date on which the Affected Party acting in accordance with the Good Industry Practice, resumes or should have resumed such of its obligations the performance of which was excused as per terms mentioned elsewhere in the tender or (ii) the Termination Date, as applicable.

- "Good Industry Practice" means those practices, methods, techniques, standards, skills, diligence and prudence which are generally and reasonably expected of and accepted internationally from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged under this Contract and acting generally in accordance with the provisions of all Applicable laws, and would mean good engineering and mining practices in the design, engineering, expansion, construction and work management and which would be expected to result in the performance of its obligations by the Contractor and in the operation and maintenance of the Mining Facilities, in accordance with this Contract, Applicable Laws, Applicable Permits, reliability, safety, environment protection, economy and efficiency. For avoidance of doubt, it is clarified that in the event of a conflict between any Good Industry Practice and any requirement and/or standard prescribed by the DGMS, the latter shall prevail and the Contractor shall have to oblige with the provisions of the latter.
- "Gol" means the Government of India and includes any agency, authority (including any regulatory authority) department, inspectorate, ministry or statutory person (whether autonomous or not) under the control and direction of the Government of India.
- "GoR" means the Government of Rajasthan and any agency, authority (including any regulatory authority) department, inspectorate, ministry or statutory person (whether autonomous or not) (including any successor there for) under the control and direction of the Government of Rajasthan.
- "Government Agency" means GoI, GoR, HCL or any state government or governmental department, commission, board, body, bureau, agency, authority, instrumentality, court or other judicial or administrative body, central, state, or local, having jurisdiction over the Contractor, the Work Site/ Work Facilities or any portion thereof, or the performance of all or any of the services or obligations of the Contractor under or pursuant to this Contract.
- "HCL" means Hindustan Copper Limited.
- "HCL's Requirements" means the document or documents identified as such and included in the Contract and any modifications thereof or addition thereto as may from time to time be issued by (or on behalf of) the Engineer-in-Charge in accordance with the Contract.
- "Joint Measurement Certificate" shall have the meaning as mentioned in the NIT.
- "Lead Member" The Lead Member, in case of a Bidding Consortium, is a member company that is responsible for execution, accountable, commission of the contract on behalf of consortium. The Lead member of the consortium must have minimum 75% of the Turnover specified in Eligibility Criteria at clause no 1.5.3.1. HCL will have all dialogue with the Lead member only during the currency of the contract, as and when required.
- "Material Adverse Effect" means material adverse effect on (a) the ability of the Contractor to exercise any of its rights or perform/discharge any of its duties/obligations under and in accordance with the provisions of this Contract and/or (b) the legality, validity, binding nature or enforceability of this Contract.

- "Material Breach" means a breach by either Party of any of its obligations under this Contract which has or is likely to have a Material Adverse Effect on the Work and which such Party shall have failed to cure.
- "Mine" means Khetri Copper Mine at Jhunjhunu District, Rajasthan, India.
- "Mine Manager" means a person authorized in writing by Owner under Section 17 of Mines Act, 1952 to be in-charge of the Mine who is responsible for the overall management, control, supervision and direction of the Mine.
- "Mobilization Period" means the period of 4 months (120 days) from the date of issue of Letter of Intent, during which, the Contractor is required to mobilize his resources and commence the Works at the Site.
- "Modification / Alteration Order" means an order given in writing by the Engineer-in-Charge to effect additions to or deletion from and alterations in the work.
- "Month" means a period beginning at 00-00 hours (Indian Standard Time) on the first day of a given English calendar month and ending at 00-00 hours (Indian Standard Time) on the first day of the next succeeding English calendar month.
- "Mtpa", means million tonne per annum.
- "Owner" means the Director (Mining) of HCL.
- "Parties" means the parties to this Contract collectively and "Party" means either of the Parties to this Contract individually.
- "Period of Liability" in relation to a Work means a period of six (6) months from the date of Completion, during which the Contractor stands responsible for rectifying all defects that may appear in the Work.
- "Person" means (unless otherwise specified or required by the context), any individual, company, corporation, partnership, joint venture, trust, unincorporated organization, government or Government Agency or any other legal entity.
- "Preliminary Notice" means the notice of intended Termination by the Party entitled to terminate this Contract to the other Party setting out, inter alia, the underlying Event of Default.
- "Project Manager" means any person appointed and authorized by the Contractor, who will take decision at Work Site independently and on behalf of the Contractor during the implementation of the Contract.
- "Related Works" means works other than the Works, performed or undertaken by the Employer or other contractors or suppliers of the Employer or any contractor employed in connection with the Work and/or services related thereto or by public or private utilities or by any Government Agency or other authorities or by any relevant authority, either prior to, concurrently or sequentially with the Works at, on, over or adjacent to the Work Site in connection with or related to the Work and which may be connected to, associated with, ancillary to or otherwise related to or relevant to the Works.

- "Representative" means either the HCL's representative or the Contractors representative.
- "Retention money" means the money which is hold by HCL for successful performance of the contract.

Rock Quality Designation (RQD): It is a rough measure of the degree of jointing or fractures in a rock mass, measured as a percentage of the drill core in lengths of 10 cm or more.

- "Rs" or "Rupees" refers to the lawful currency of the Republic of India
- "Security Deposit" means the deposit for security of performance of its obligations during the Contract Period to be provided by the Contractor in accordance relevant applicable clause/clauses mentioned in the tender.
- "Shift" means the eight hours period consisting three shifts in a day of 24 hours (Indian Standard Time).
- "**Site**" shall mean the lands and other places on, under, in or through which the permanent works are to be carried out and any other lands or places provided by HCL for the purpose of the contract.
- "**Specifications**" shall mean all directions, various technical specification, provisions and requirements attached to the contract, which pertain to the method and manner of performing the work or works to the quantities and qualities of the work or works and the materials to be furnished under the contract.
- "Successful Bidder" means the bidder / consortium of bidders who has been awarded the work.
- "Supervision" means and shall include the successive control and directions given by the Contractor in relation to contract work, during the execution of the work and services.
- "Tax" means and includes all taxes, fees, cesses, levies that may be payable by the Contractor under any Applicable Law.

Tax shall not include any penalty, interest or other penal sum levied on or payable by the Contractor on account of non-payment, short payment or delayed payment of Tax or on account of any other default.

- "**Technical Assistance**" means the provision by the Bidder for technical supervision and assistance for maintenance, operation etc. of the Equipment after the commissioning and up to the Contract Period.
- "Temporary Works" shall mean every work which is of a temporary nature, and which the Contractor shall remove, or at the option of HCL, hand over to HCL, upon such temporary works having fulfilled the reason for which they were required by the Contractor.
- "Tender" means collectively the tender issued to bidders including any supplements/amendments thereto and other documents, drawings, specifications, agreed variations, if any.
- "Termination" means early termination of this Contract pursuant to Termination Notice or otherwise in accordance with the provisions of this Contract but shall not, unless the context otherwise requires, include the expiry of this Contract due to efflux of time in the normal course.
- "Termination Date" means the date specified in the Termination Notice as the date on which Termination occurs.
- "Termination Notice" means the notice of Termination by either Party to the other Party, in accordance with the applicable provisions of this Contract

- "Tests" means the tests to be carried out by Contractor to ascertain the safety and reliability of the Works carried out by the Contractor for the Work.
- **"Tonnes"** or "tonne" or abbreviations "te" or "Te" or "T" or "t" or "MT" used in Tender in suffix of a quantity means a metric tonne of 1000 (One thousand) kilograms.
- "Work" means engineering, procurement, construction and designing of the Works and all Related Works in relation to the Work, in accordance with the provisions of this Contract.
- "Work Agreements" means collectively this Contract and any other material contract entered into or may hereafter be entered into by the Contractor in connection with the Work.
- "Work/ Works/ Job" shall mean all or any portion of the entire activities to be performed in relation to the Work of hauling of rock in accordance with the scope of the work, whether supplemented or not by HCL or the Engineer-in-Charge during the progress of execution of the activities by the Contractor by explanatory instructions.
- "Work Site / Site" means Khetri copper mine at Jhunjhunu District, Rajasthan, India where the Work is to be implemented by the Contractor in accordance with the Work Requirements or provision of any Temporary Work or for any other purpose for execution of Work.
- "Year" year shall mean 12 months, normally financial year starting on the 1st of April of each calendar year and closing on the 31st March of the subsequent Calendar year.

1.2 Interpretation

In this Contract, unless the context otherwise requires,

- a) any reference to a statutory provision shall include such provision as is from time to time modified or re-enacted or consolidated so far as such modification or re-enactment or consolidation applies or is capable of applying to any transactions entered into hereunder;
- b) references to Applicable Law shall include the laws, acts, ordinances, rules, regulations, notifications, guidelines or byelaws which have the force of law in any State or Union Territory forming part of the Union of India;
- c) the words importing singular shall include plural and vice versa, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal entity);
- d) the headings are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Contract;
- e) the words "include" and "including" are to be construed without limitation;
- f) references to "construction" include investigation, design, engineering, procurement, delivery, transportation, installation, processing, fabrication, testing, commissioning and other activities incidental to the construction:
- g) any reference to any period of time shall mean a reference to that according to Indian Standard Time;

- h) the Schedules to this Contract form an integral part of this Contract and will be in full force and effect as though they were expressly set out in the body of this Contract;
- i) any reference at any time to any agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference;
- j) references to recitals, Articles, sub-articles, Clauses, or Schedules in this Contract shall, except where the context otherwise requires, be deemed to be references to recitals, Articles, sub-articles, Clauses and Schedules of or to this Contract;
- k) any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Contract from or by any Party or the Engineer-in-Charge shall be valid and effectual only if it is in writing under the hands of duly authorized representative of such Party or the Engineer-in-Charge, as the case may be, in this behalf and not otherwise;
- 1) Unless otherwise stated, any reference to any period commencing "from" a specified day or date and "till" or "until" a specified day or date shall include both such days and dates.

1.3 Measurements and Arithmetic Conventions

All measurements and calculations shall be in metric system and calculations done to 2 decimal places, with the third digit of 5 or above being rounded up and below 5 being rounded down.

1.4 Ambiguities and Discrepancies

In case of ambiguities or discrepancies within this Contract, the following shall apply:

- a) Between two Articles of this Contract, the provisions of specific Articles relevant to the issue under consideration shall prevail over those in other Articles;
- b) Between the written description on the Drawings and the Specifications, the latter shall prevail;
- c) Between the dimension scaled from the Drawing and its specific written dimension, the latter shall prevail;
- d) Between any value written in numerals and that in words, the latter shall prevail.

1.5 Resolution of Inconsistencies in Contract Documents

The provisions of the various Articles of this Contract shall prevail over those of any other documents forming part of the Contract. Should there be any discrepancy, inconsistency, error and omission or any of them arises in the Contract, the matter may be referred to the Engineer-in-Charge, who shall give his decision and issue instructions to the Contractor, directing the manner in which the work is to be carried out. The decision of the Engineer-in-Charge shall be conclusive and final and the Contractor shall carry out the work in accordance with the decision of the Engineer-in-Charge.

1.6 Background Information and the manner in which discrepancies are resolved

- **1.6.1** The Employer gives no warranty or undertaking as to the completeness, accuracy or fitness for purpose of any of the Background Information or the various documents that together comprise the Contract. Subject to the express provisions of the Contract, neither the Employer nor any of its agents or servants shall be liable to the Contractor in contract, tort (including negligence or breach of statutory duty), statute or otherwise as a result of:
- a) Any inaccuracy, omission, unfitness for purpose or inadequacy of any kind whatsoever in the Background Information;
- b) Any failure to make available to the Contractor any materials, documents, drawings, plans or other information relating to the Works or the Work;
- c) Any ambiguities, discrepancies, inconsistencies, divergences, design or construction impracticalities or omissions from, within, or between the documents which comprise the Contract.
- **1.6.2** The Contractor warrants and represents to the Employer that:
- a) it has conducted its own analysis and review of the Background Information and that it has satisfied itself as to the accuracy, fitness for purpose and completeness of all such Background Information;
 and
- b) the Contractor has thoroughly examined the documents comprising the Contract and is satisfied that there are no ambiguities, discrepancies, inconsistencies, divergence, design or construction impracticalities or omissions from, within and between such documents and that such documents are accurate, complete and sufficient in all respects for the purposes of the design and execution of the Works; and
- c) after a complete and careful examination, it has made an independent evaluation of the scope of the Works required and has determined the nature and extent of the difficulties, risks and hazards that are likely to arise or may be faced by it in or about of the performance of all its obligations in the Contract. The Contractor hereby acknowledges its responsibility in respect of all such risks and hazards and agrees that the Employer shall not be liable in respect of the same in any manner whatsoever to the Contractor whether in contract, tort, statute or otherwise.
- 1.6.3 Without prejudice if, notwithstanding the Contractor's analysis and examination of the documents comprising the Contract, any ambiguities, discrepancies, inconsistencies, divergence, design or construction impracticalities or omissions from, within or between any of the documents comprising the Contract, come to the attention of either Party, that Party shall immediately notify the other Party and HCL' Representative, specifying the ambiguity, discrepancy, inconsistency, divergence, design or construction impracticality or omission (as the case may be) and HCL's Representative shall issue instructions in regard thereto.
- **1.6.4** The Parties agree that any ambiguity, discrepancy, inconsistency, divergence, design or construction impracticality or omission as aforesaid shall not vitiate the Contract. No instruction given by HCL's Representative, shall amount to a change and the Contractor shall not be entitled to any extension of time or additional payment in respect thereof.

1.6.5 HCL's Requirements shall remain in the sole custody of HCL's Representative but two copies thereof shall be furnished to the Contractor free of charge. The Contractor shall provide and make at its own expense any further copies required by it.

CONTRACT

2.1 Grant of Contract

Subject to and in accordance with the terms and conditions set forth in this Contract, HCL hereby grants and authorizes the Contractor to investigate, study, design, engineer, procure, finance and carry out office/camp construction and any other work related to the awarded work in accordance with the provisions of the Contract and Good Industry Practices and to exercise and/or enjoy the rights, powers, benefits, privileges, authorizations and entitlements as set forth in this Contract.

2.2 Contract Period

Duration of contract is sixty (60) months from the date of issue of LoI / Work Order whichever is earlier, including four (4) months for mobilization and training etc. The 60 months contract period will be decided based on the performance of the contractor after 2½ years excluding mobilization period and the contract period may be terminated after 3 years at the sole discretion of HCL, if the performance of the contractor is less than 80% for reasons attributed to the contractor. However, this will not be applicable if the performance is less than 80% in any such cases if the reasons beyond the control of the contractor or HCL.

However, HCL reserves the right not to extend the contract and to initiate tendering process two years prior to the expiry of the contract to invite fresh bids for a new contract for a further suitable period which HCL may deem fit for continuing the mining operations after the expiry of the said period of the current contract. The Successful Bidder executing the current contract will be free to bid for the fresh contract if it meets the new pre-qualifying requirements specified by HCL at the time of inviting fresh bids. Further, HCL reserves the right not to invite the fresh bids and to operate the mine on its own. The Contract Period may be extended further as stipulated under Article 8.6 hereunder, provided that the period of any such extension shall be decided by HCL in its sole and absolute discretion.

However in extension period, no escalation will be given to the contractor and no LD will be imposed in the extension period.

The extension of contract period when granted shall be subject to the following conditions:

(i) Any increase / decrease in taxes and duties on account of statutory increase / decrease fresh imposition of any duties or taxes which take place during the extended period shall be admissible / availed of, provided it is CENVATABLE / setoff is admissible against these levies.

2.3 Contractual Quantity

2.3.1 Deepening of Service Shaft from (-) 60ML to (-) 196ML and from (-) 16ML to (-) 60ML with complete lining, equipping, design, engineering, fabrication, manufacturing, supply, loading, unloading, storage, erection, testing, commissioning, integration with the existing system, for man winding system and equipment including electrical instruments, instrumentation and other

utilities, structural and civil foundation.

2.3.2 Deepening of Production Shaft from (-) 85ML to (-) 226ML including removal of plug with complete lining, equipping, design, engineering, procurement, supply, fabrication, loading, unloading, storage, erection, testing, commissioning, integration with the existing system, equipment including electrical instruments, instrumentation and other utilities, structural and civil foundation. The Production shaft will be furnished and equipped from 0 ML to (-) 226 ML and will be integrated with the existing System.

2.4 Acceptance of Contract

In consideration of the Contract Price agreed to be paid by HCL and other good and valuable consideration expressed herein, the Contractor hereby accepts the Contract and agrees and undertakes to implement the Work/provide and operate Work Facilities, and to perform/discharge all of its obligations as per Good Industry Practices and in accordance with Applicable Laws and the provisions hereof.

CONDITIONS PRECEDENT

3.1 Conditions Precedent

The rights and obligations of the Contractor under this Contract are subject to the satisfaction in full of the following conditions precedent to be fulfilled on or before Commencement Date unless any such condition has been waived as provided in this Article:

- a) the Contractor shall have applied for or obtained necessary Applicable Permits unconditionally or if subject to conditions then all such conditions have been satisfied in full and such Applicable Permits are and shall be kept in full force and effect for the relevant period during the subsistence of this Contract;
- b) certified true copies of all Work Agreements have been delivered by the Contractor to HCL;
- c) the Performance Security has been provided by the Contractor to HCL and the same is in full force and effect;
- d) all of the representations and warranties of the Contractor set forth in this Contract are true and correct as on date of this Contract and as on the Commencement Date;
- e) HCL shall have received from the Contractor copies (certified as true copies by an authorized officer of the Contractor) of the constitutional documents of the Contractor;
- f) HCL shall have received copies (certified as true copies by a director of the Contractor) of all resolutions adopted by the Board of Directors of the Contractor authorizing the execution, delivery and performance by the Contractor of this Contract and each of the Work Agreements;
- g) HCL shall have received from the Indian legal counsel of the Contractor a legal opinion with respect to the authority of the Contractor to enter into this Contract and the Work Agreements and the enforceability of the provisions thereof;
- h) The Contractor having executed the Integrity Pact as given in Appendix VA.
- i) The Contractor ensuring that its personnel have adequate insurance coverage and are medically fit (as per legal requirements for working in mines), and have adequate vocational training.
 - Any of the conditions precedents as set forth above may be waived fully or partially by HCL at anytime in its sole discretion.

3.2 Obligation to Satisfy the Conditions Precedent

The Contractor shall make all reasonable endeavors to satisfy the conditions precedent set out in Article 3.1 above and shall bear its respective cost and expense of satisfying such condition precedent unless otherwise expressly provided.

3.3 Termination upon failure to satisfy the Conditions Precedent

If the conditions precedent are neither fulfilled on or before the Commencement Date or any other later date as may have been stipulated by HCL, nor waived, then HCL shall have the right to terminate this Contract without any liability to any Party by giving thirty (30) days' notice and Bid Security or Performance Security, as the case may be, by the Contractor shall stand forfeited.

WORK SITE

4.1 Handover of Work Site

- a) HCL shall assign work to the Contractor at the designated Work Site free from encumbrance together with the necessary right of access for the purpose of implementing the Work within 4 months (120 days) from the date of issuance of LoI.
- b) Upon the Work Site or any part thereof being handed over pursuant to the Article 4.1 (a), the Contractor shall, subject to the provisions of Article 3, have the right to enter upon, occupy and use the Work Site or part thereof delivered to it by HCL and to make at its costs, charges and expenses, such investigation, expansion, excavation and improvements in the Work Site as may be necessary or appropriate to implement the Work in accordance with the provisions of this Contract.

4.2 Rights, Title and Use of the Work Site

- a) The Contractor shall have the right to the use of the Work Site in accordance with the provisions of this Contract and for this purpose it may regulate the entry and use of the same by other parties with HCL's permission. Provided that such access or use by the Contractor and/or any other party shall not result in a Material Adverse Effect and that the Contractor shall, in the event of any physical damage to the Work Site/Work Facilities on account thereof, ensure that the Work Site/Work Facilities are promptly restored at its cost and expenses.
 - Provided further, that to the extent such access and use allowed to the Contractor affects the performance of any of its obligations hereunder, the Contractor shall not be deemed or construed to be in breach of its obligations nor shall it incur/suffer any liability on account thereof.
- b) The Contractor shall not part with or create any Encumbrance on the whole or any part of the Work Site save and except as set forth and permitted under this Contract.
- c) The Contractor shall not without the prior written consent or approval of HCL use the Work Site for any purpose other than for the purpose of the Work/the Work Facilities and purposes incidental or necessary thereto.

4.3 Peaceful Possession

HCL hereby warrants that:

- a) The Work Site together with the necessary access to the Work Site having been acquired through the due process of law belongs to and is vested in HCL, and that HCL has full powers to hold and deal with the same consistent, inter alia, with the provisions of this Contract and that the Contractor shall, in respect of the Work Site, have no liability regarding any compensation payment on account of land acquisition or rehabilitation/resettlement of any Persons affected thereby.
- b) The Contractor shall, subject to complying with the terms and conditions of this Contract, execute work at the designated work site during the contract period. In the event the Contractor is obstructed by any Person claiming any right, title or interest in or over the Work Site or any part thereof or in

the event of any enforcement action including any attachment, distain, appointment of receiver or liquidator being initiated by any Person claiming to have any interest in/ charge on the Work Site or any part thereof, HCL shall, if called upon by the Contractor, defend such claims and proceedings and also keep the Contractor indemnified against any consequential loss or damages which the Contractor may suffer, on account of any such right, title, interest or charge.

ENGINEER-IN-CHARGE

5.1 Nomination of Engineer-in-Charge

HCL shall immediately and in any case not later than one (1) week of the Appointed Date (date of issue of LoI), nominate an officer to carry out roles and responsibilities of Engineer-in-Charge for the Work and communicate the details of the same to the Contractor.

Further, the Engineer-in-Charge shall nominate another officer who could act in his position on instances of the said officer (*i.e.* the Engineer-in-Charge) being away from the Work Site.

5.2 Rights and Obligations of Engineer-in-Charge

Engineer-in-Charge shall be the representative of HCL to review, monitor, co-ordinate activities and issue directions related to the Work.

Acts of Engineer-in-Charge as far as it is within the rights and obligations set out in **Schedule I** shall be deemed to be acts of HCL.

5.3 Notifications of change in Office of Engineer-in-Charge

In the event of change in the office of Engineer-in-Charge due to retirement/ replacement / vacation of the nominated officer, HCL shall promptly notify the details of such change to the Contractor.

CONTRACTOR'S OBLIGATIONS

In addition to and not in derogation or substitution of any of its other obligations under this Contract, the Contractor shall have the following obligations:

- **6.1 Performance Security Deposit:** Security deposit appearing in **Schedule VIII** shall be submitted within 30 days from the date of issue of LoI.
- a) The Contractor shall, for due and punctual performance of its obligations during the Contract Period, deposit a Performance Security which shall be equal to five (5) per cent of the Contract Price with HCL, within thirty (30) days from the issuance of LoI.
- b) The Performance Security Deposit for the complete amount, as stated in (a) above, shall be payable by the Contractor by way of Demand Draft/ Pay Order/Banker's Cheque/Bank Guarantee from a schedule commercial bank in the format prescribed under **Schedule VIII**. Performance Security Deposit in any other format is not acceptable. Payment shall not be released if PSD has not been deposited in totality.
- c) The Bank Guarantee shall be valid for a period of 84 months from the date of issue of LoI and it is to be extended further one month prior to the expiry date till six months after the issue of completion certificate. In case of failure, HCL will have the right to encash the BG.
- d) HCL is at liberty, after having given fourteen (14) days' written notice to the Contractor and without any further reference to the Contractor, to realize and / or forfeit the Performance Security deposit for non-fulfillment and or for unsatisfactory performance of the Contract or any clauses thereof.
- e) Performance Security Deposit in the form of Bank Guarantee shall remain binding not withstanding such variations, alterations or extensions in time as may be made, given, conceded or agreed to between the Contractor and HCL, and the Contractor agrees to extend the Bank Guarantee suitably if the Work is not completed as per the Contract Period or it is extended by the written consent of HCL.
- f) HCL shall not be liable for payment of interest under Performance Security Deposit.
- g) The Performance Security Deposit shall be released, on application by the Contractor within one (1) month of issue of final work completion certificate by HCL.
- h) The Bank Guarantee shall not in any way be construed as a limitation of the Contractor's responsibility or liability pertaining to its obligation and guarantees under the Contract and shall be without prejudice to any other remedies available to HCL as expressly set out in the Contract.

6.2 Contract Execution Plan

6.2.1 Work Plan

a) The Contractor shall, within thirty (30) days of date of issue of LoI, in consultation with the Engineer-in-Charge finalize and submit to the Engineer-in-Charge, a Work Plan. The plan will contain resource mobilization plan giving details of manpower (statutory, supervisory, skilled, semi

skilled and unskilled), machinery, equipment tools and tackles and other major materials/consumables as required for completion of the work as per schedule.

The Engineer-in-Charge shall review the Plan submitted by the Contractor within five (5) days of the receipt thereof and convey its comments/observations to the Contractor including the need, if any, to modify the same. If the comments/ observations of the Engineer-in-Charge require, the Plan to be modified, the Contractor shall suitably modify the same and resubmit it to the Engineer-in-Charge for further review within five (5) days. The Engineer-in-Charge shall give its observations and comments, if any, within three (3) days of receipt of such revised Plan, which shall be incorporated by the Contractor into the final Plan.

In the event that the Engineer-in-Charge is not able to review the Plan in full within the prescribed time, the Engineer-in-Charge may advise the Contractor to commence the Works. Notwithstanding any such review or failure to review by the Engineer-in-Charge, the Contractor shall be solely responsible for the adequacy of the Plan and the Contractor shall not be relieved or absolved in any manner whatsoever of any of its obligations hereunder.

6.2.2 Other submissions

The Contractor shall before the Commencement Date i.e. within 04 (four) months (120 days) from the date of issuance of LoI, will submit to HCL / Engineer-in-Charge, the following information, for the records of HCL:

- (i) Provident Fund Account Details
- (ii) Organization Structure
- (iii) Details of Work Manager, Key supervisory staff
- (iv) Contract Labour License
- (v) Medical Examination Records of the Employees as per Mines Act
- (vi) Permanent account number of Income tax (PAN)
- (vii) TIN
- (viii) GST number
- (ix) Other information as per requirement of contract, if any

6.3 Works

- (i) The Contractor is required to commence the Works on the Commencement Date i.e. within 04 (six) months (120 days) from the date of issuance of LoI.
- (ii) The Contractor shall in accordance with Good Industry Practices adhere to the Plan and complete the Works on or before the expiry of the Contract Period or as per agreed schedule.
- (iii) The Contractor shall, before commencement of the Works;
 - a) have requisite organization and designate and appoint suitable officers/ representatives as it may deem appropriate to supervise the Work, to deal with the Engineer-in-Charge /HCL and

- to be responsible for all necessary exchange of information required pursuant to this Contract;
- b) construct, provide and maintain a reasonably furnished site office accommodation for its Project Manager and key supervisors at the Work Site.
- c) have achieved Completion of Mobilization.

Failure to achieve the Completion of Mobilization before the commencement of Works shall not constitute a ground for extension of Contract Period.

- (iv) For the purposes of determining that the Works are being undertaken in accordance with the Work Requirements, the Contractor shall on its own and/or whenever directed by Engineer-in-Charge, with due diligence, carry out all necessary and periodical Tests in accordance with the instructions and under the supervision of the Engineer-in-Charge. The Contractor shall maintain proper record of such Tests and the remedial measures taken to cure the defects or deficiencies, if any, indicated by the Test results.
- (v) On completion of the Works as per the Plan, the Contractor will notify the same to Engineer-in-Charge and ascertain the completeness and acceptability of the work.
- (vi) The Engineer-in-Charge may, by written notice, require the Contractor to suspend forthwith the whole or any part of the Works if in its reasonable opinion the same is being carried on in a manner that is not in conformity with the Work Requirements and/or Plan.
- (vii) The Successful Bidder shall not assign either in part or in whole, its obligations (without diluting any of its primary responsibility and duties) to be performed under this contract to any other party, except with HCL's prior written consent.
- (viii) Contracts must comply with the provisions of the contract and each and every clause of scope of work will be binding upon them.

6.4 Material Breach of Work Requirements

- (i) The Contractor shall be deemed to be in Material Breach of Work Requirements if the Engineer-in-Charge acting reasonably and in accordance with the provisions of this Contract, has determined that due to breach of its obligations by the Contractor:
 - a) There has been failure/undue delay in implementation of the Works and the Works have not been carried out in accordance with the Work Requirement/ Plan;
 - b) There has been a serious or persistent default in adhering to safety requirements and standards as prescribed by DGMS and thereby the Mining Facilities or any part thereof is not safe for operations;
 - c) There has been persistent breach of Work Requirements/ Plan.

For avoidance of doubt, persistent breach shall mean:

- i. Any breach of Work Requirements by the Contractor which has not been remedied by the Contractor despite a notice to remedy in respect thereof issued by the Engineer-in-Charge/HCL; or
- ii. Recurrence of a breach by the Contractor, during the pendency of notice to remedy by the Engineer-in-Charge/HCL requiring the Contractor to remedy a breach; or
- iii. Repeated occurrence of a breach notwithstanding that earlier breaches have been remedied pursuant to notice to remedy or otherwise.

(ii) HCL's Rights

Upon occurrence of a Material Breach of Work Requirements, HCL shall, without prejudice to and notwithstanding any other consequences provided therefore under this Contract, be entitled to terminate this Contract.

6.5 Insurance

- a) The Contractor shall at its cost and expense, purchase and maintain, during the Contract Period such insurance as are necessary including but not limited to the following:
 - i. Comprehensive third party liability insurance including injury or death to personnel / representatives of Persons who may enter the Work Site;
 - ii. Workmen's compensation insurance;
 - iii. Any other insurance that may be necessary to protect the Contractor, its employees and its assets against loss, damage, destruction, business interruption or loss of profit including insurance against all Force Majeure Events that are insurable.

b) Evidence of Insurance

The Contractor shall, from time to time, provide to HCL copies of all insurance policies (or appropriate endorsements, certifications or other satisfactory evidence of insurance) obtained by the Contractor in accordance with this Contract.

c) Validity of Insurance

The Contractor shall from time to time promptly pay insurance premium, keep the insurance policies in force and valid throughout the Contract Period and furnish copies thereof to HCL.

d) Application of Insurance Proceeds

Unless otherwise provided herein, the proceeds of all insurance policies received shall be promptly applied by the Contractor towards repair, renovation, restoration or re-instatement of the Work Facilities or any part thereof which may have been damaged or destroyed. The Contractor may designate the Lenders as the loss payees under the insurance policies or assign the insurance policies in their favour as security for the financial assistance provided by them to the Work. The Contractor shall carry out such repair, renovation, restoration or re-instatement to the extent possible in such manner that the Work Facilities after such repair, renovation, restoration or re-instatement be as far as possible in the same condition as it were prior to such damage or destruction, normal wear and tear excepted.

6.6 Employment of Labour

The Contractor shall, at its cost employ all necessary workmen and personnel for due and punctual performance of its obligations during the Contract Period in accordance with all Applicable Laws and the conditions specified in **Schedule II** and Good Industry Practices.

6.7 Health & Safety, Training, and Environment

- 6.7.1 The Contractor shall ensure, at its own cost, that its workers, employees and personnel are suited for undertaking the Works. Additionally, all personnel of the Contractor will have to undergo an Initial Medical Examination ("IME") before they can commence work on the Work Site. For persons above forty five (45) years of age Periodical Medical Examination ("PME") has to be conducted at the end of the third (3rd) year. IME and PME shall be carried out at Khetri Copper Project hospital. The Charge for IME is Rs 460.00 (Rupees four hundred and sixty only) per person and charge for "O" Form for PME is Rs 740 (Rupee seven hundred forty only). Contractor shall also maintain complete first aid facilities for all his employees and personnel. Industrial injuries shall be reported promptly to the Engineer-in-Charge / HCL, and a copy of Contractor's report covering each personal injury requiring the attention of a physician shall be furnished to the Engineer-in-Charge. Prior to the employment, each worker likely to be engaged by the Successful Bidder should be medically examined and only medically fit persons will be allowed to work.
- **6.7.2** First Aid facilities and provisions as required under Mines Rules, 1955 with latest amendments shall be kept at the work site by the Successful Bidder.
- 6.7.3 The Successful Bidder shall be responsible for and shall pay compensation to his workmen which would be payable for injuries due to accidents and/or notified and compensable disease under the Workmen's Compensation Act 1923, hereinafter called the said Act. If such compensation is paid by HCL as principal employer under sub–section (1) of the section (12) of the said Act, such compensation shall be recovered by HCL from his Security Deposit or from any sum which may be due or may become due to the Successful Bidder on any account whatsoever, the Successful Bidder should adequately insure the workers, and HCL shall not permit the Successful Bidder to start the work unless such insurance certificate is produced.
- **6.7.4** All personnel of the Contractor will be given vocational training including initial training & special training for operators etc. free of cost at the Vocational Training Centre of Khetri Copper Project-by HCL.
- **6.7.5** Additionally, the Contractor shall, at its cost, comply with all necessary environment, health and safety measures for due and punctual performance of its obligations during the Contract Period in accordance with all Applicable Laws and the conditions specified in **Schedule III** and Good Industry Practices.

6.8 Special Conditions

a) All rock obtained from excavation at the Work Site shall remain the property of HCL and shall be disposed off at the site/location allocated by Engineer-in-Charge.

- b) All fossils, gold, coins and articles of antique value and interest found at the Work Site shall be the absolute property of HCL and the Contractor shall take reasonable precautions to prevent its workmen or any other person from removing or damaging any such articles and shall inform immediately upon finding thereof and before removal inform the Engineer-in-charge and carry out the Engineer-in-Charge's directions as to the manner of treatment of the same.
- c) Immediately, on request of HCL, carry out diligently all Emergency Works.

6.9 General Obligations

The Contractor shall at its own cost and expense:

- a) File all necessary and statutory application, returns and reports and obtains all Applicable Permits in conformity with the Applicable Laws and be in compliance thereof at all times during the Contract Period;
- b) Procure and maintain in full force and effect, as necessary, appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used in or incorporated into the Work;
- c) Endeavour to incorporate in each Work Agreement specific provisions that would entitle HCL or a nominee of HCL to step into the same at HCL's discretion, in place and substitution of the Contractor;
- d) Provide all necessary assistance to the Engineer-in-Charge as it may reasonably require for the performance of its duties and services;
- e) Appoint, supervise, monitor and control as necessary, the activities of Contractors, if any, under the respective Work Agreements;
- f) Make efforts to maintain harmony and good industrial relations among the personnel employed in connection with the performance of its obligations under this Contract;
- g) Make its own arrangements for construction materials and observe and fulfill the environmental and other requirements under the Applicable Laws and Applicable Permits;
- h) Be responsible for quality, soundness, durability, safety and the overall Work Requirements to implement and/or operate and maintain the Work/Work Facilities;
- i) Ensure that the Work Site remains free from all encroachments and take all steps necessary to remove encroachments, if any;
- j) Afford access to the Work Site to the authorized representatives of HCL, the Engineer-in-Charge and any Government Agency having jurisdiction over the Work Site, including those concerned with safety, security or environmental protection to inspect the Work and to investigate any matter within their authority and upon reasonable notice, the Contractor shall provide to such persons assistance reasonably required to carry out their respective duties and functions;
- k) Obtain at its costs and charges, special or temporary right of access, occupation or user of any property that may be required by it in connection with implementation of the Work. The Contractor

- shall also obtain at its cost such facilities as may be required by it for the purposes of the Work and the performance of its obligations under this Contract.
- l) As per recommendations of 10th National Conference on safety in Mines, the Contractor shall be required to adhere to the following additional responsibilities for safety in the Mine:
 - I. Prepare a written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with them
 - II. Provide a copy of the SOP to the Engineer-in-charge.
 - III. Keep an up to date SOP and provide a copy of changes to Engineer-in-charge.
 - IV. Ensure that all the Works are being carried out in accordance with the Applicable Laws and SOP and for the same, the Contractor will deploy adequate qualified and competent personnel for the purpose of carrying out the Works in a safe manner.
 - V. Ensure that every person engaged by him in the Mine must wear safety gadgets to be provided by the Contractor at his own cost and expense. If Contractor fails or is unable to provide safety gadgets, Engineer-in-charge will provide the same and the expenses accrued for the safety gadgets will be deducted from the running bill of the Contractor.
 - VI. Submit to DGMS, quarterly returns indicating:
 - i. Name of firm,
 - ii. Registration number,
 - iii. Name and address of persons heading the firm,
 - iv. Nature of work,
 - v. Type of deployment of work persons,
 - vi. Number of work persons deployed,
 - vii. Number of work persons who hold vocational training certificate,
 - viii. Number of persons who have undergone IME and
 - ix. Type of medical coverage given to the work persons.
- m) Contractor shall be responsible to establish and maintain Time Office at site as required under the statute.

n) Fencing and barricades:

- 1. Successful Bidder shall erect and maintain fencing and barricades required in connection with his operation to guard or protect
 - i) Excavations,
 - ii) Hoisting areas,
 - iii) Areas adjudged, hazardous by Successful Bidder's or Owner's representatives,
 - iv) Owner's existing property likely to be damaged by Successful Bidder's operations,
 - v) Unloading spots, and
 - vi) Any other place as directed by the Engineer-in-charge.

- 2. Successful Bidder's employees shall become acquainted with Owner's barricading practice and shall respect the provisions thereof.
- o) **Safety provisions to be displayed on notice board:** The safety provisions should be displayed on the notice board at a permanent place at the work spot. The person responsible for compliance of the safety code shall be named therein by the Successful Bidder.
- p) **Support:** Wherever necessary, temporary support shall be provided/erected and maintained so as to keep the area in safe condition till the permanent support is provided/erected. If in the opinion of the Engineer-in-charge any other type of support is necessary, Successful Bidder shall comply with the instructions.
- q) Alignment: It shall be Successful Bidder's responsibility to excavate all drives, cross-cuts, and other excavations to correct alignment, gradient and dimensions. However, HCL may perform check survey as per requirement and the Successful Bidder shall render all the necessary facilities to perform the task.

6.10 No Breach of Obligations

The Contractor shall not be considered to be in breach of its obligations under this Contract nor shall it incur or suffer any liability if and to the extent performance of any of its obligations under this Contract is affected by or on account of any of the following:

- a) Force Majeure Event, subject to Article 9.2(b)
- b) HCL Event of Default,
- c) Compliance with the instructions of the Engineer-in-Charge/HCL or the directions of any Government Agency other than instructions issued as a consequence of a breach by the Contractor of any of its obligations hereunder;
- d) Emergency decommissioning of the Work or part thereof;
- e) Contractor's inability to remove any accident debris due to non-completion of any police / insurance related inquiry/survey despite prompt steps having been taken by the Contractor in that regard.

6.11 Related Works

6.11.1 Contractor's acknowledgement

The Contractor acknowledges that Related Works may be performed and that it is of paramount importance that the design and execution of the Works are fully and completely coordinated with the Related Works in view of their concurrent and sequential nature and that such coordination is of the utmost importance to the successful integration of the Works with the Related Works and to the timely completion of the Work.

6.11.2 Related Works' responsibilities

Accordingly, the Contractor shall at its own cost and expense, at all times and otherwise in accordance with the requirements and directions of HCL's Representative:

- a) Plan, programme, and perform the design and execution of the Works so as to minimize any interference with or hindrance of the performance of the Related Works; and
- b) At all times take every necessary step to protect the Works from accidental damage caused by the Related Works; and
- c) At all times co-operate with the Employer, HCL's Representative and any Related Works contractors so as to promote and foster a coordinated and integrated approach to the Works and the Related Works. The Contractor shall co-ordinate its activities with Related Works contractors so as to prevent, as far as possible, the performance of work by such Related Works contractors from impeding the performance of the Contractor or unreasonably disturbing the free movement of traffic around, on or in the vicinity of the Work Site; and
- d) Comply with all obligations as to interfacing the Works with the Related Works as are detailed in HCL's Requirements; and
- e) Advise the Employer if any plans, designs, specifications and drawings of the Related Works contractors supplied by the Employer are in any way incompatible or inconsistent with or otherwise detrimental to the Works. In the case of such incompatibility or inconsistency the Contractor shall supply the Employer with full details of the same and make appropriate recommendations as to how the incompatibility or inconsistency may be remedied; and
- f) Monitor the coordination and integration of the Works with the Related Works and advise the Employer's Representative in writing as and when it becomes apparent that execution of the Works is likely to be the subject of delay and/or disruption and recommend reasonable proposals to reduce or prevent such delay and/or disruption.

6.11.3 Co-ordination meetings

HCL's Representative shall convene regular co-ordination meetings with the Contractor and Related Works contractors in order to:

(a) Resolve conflicts in the order and sequence of the Works and Related Works in order to effect reasonable co-ordination and integration of the execution of the Works with the execution of the Related Works; and

6.11.4 Failure to co-ordinate

In the event that the design and execution of the Work and the design and execution of the Related Works are not being coordinated and integrated to the reasonable satisfaction of the Employer's Representative, the Employer's Representative may issue such instructions as is necessary including, but not limited to:

- (a) suspending the progress of the design (to the extent required by the Contract) or execution of the Works or any part thereof; and/or
- (b) changing the Works including the omission of work from the Contract and its execution by others at the risk and cost of the contractor.

For the avoidance of doubt, where the Employer's Representative acting reasonably, determines that an instruction under the relevant clause of the contract is required as a result of a breach by the Contractor of its obligations. The Contractor shall not be entitled to any payment whatsoever in respect of any such instruction or to any extension of time in respect thereof and the costs to the Employer of such instruction including the cost of any such suspension, or removal and execution by others shall, without prejudice to the Employer's other rights under the Contract, be deducted from the Contract Price.

6.11.5 The Employer's Representative's assistance

In the event that the design and execution of the Works and the design (if any) and execution of any Related Works are unable to be coordinated and integrated in accordance with this Article 6.11 as a result of circumstances beyond the control of the Contractor, the Contractor may request the Employer's Representative:

- (a) to issue within ten (10) days of the Contractor's request, such instructions as the Employer's Representative may consider necessary to enable the Contractor to comply with its obligations under this Article 6.11; and/or
- (b) to use its reasonable endeavour to assist in procuring the removal of the hindrance or impedance preventing the Contractor from complying with its obligations under this Article 6.11.

6.11.6 Contractor to bear costs

The Contractor shall bear all costs and expenses associated with any change or remedied work rendered necessary to the design or execution of the Works or to the design or execution of work of any Related Works contractor as a result of any failure on the Contractor's part to comply with the provisions of this Article 6.11. Subject always to this Article 6.11 if in the opinion of HCL's Representative any cost is or is likely to be incurred partially as a result of a failure by the Contractor and partially as a result of a failure by a Related Works Contractor, then in the event that the Contractor and the Related Works Contractor are unable to agree on the apportionment of such costs between them, HCL's Representative may instruct the Contractor to make a change or carry out any repair it deems necessary and, notwithstanding the provisions of Article 8 in valuing such change or repair, it shall be entitled to make what it in its absolute discretion the assessment of such costs allocable to the Contractor for such change or repair as a result of the Contractor's failure to comply with the requirements of this Article 6.11.

6.11.7 Contractor's obligations

Without limiting its obligations under this Article 6.11 the Contractor shall exercise due care and diligence in the design and execution of the Works where such design and execution of the Works affects or is likely to affect the Related Works and shall bear all costs, expenses, damages and losses suffered by any Related Works Contractor as a result of its failure to comply with such obligations.

6.11.8 Contractor's Indemnities

The Contractor shall indemnify and keep indemnified the Employer against all claims, proceedings, damages, costs, losses, charges and expenses of any nature whatsoever arising from the Contractor's failure to comply with its obligations under this Article 6.11.

6.11.9 Temporary Works

The Contractor shall be fully responsible for the cost of all delays to the Works or any part where such delays have been occasioned to or in connection with Temporary Works by the defaults or omissions of any Related Works Contractor and it shall not be entitled to any extension of time or additional payment in respect thereof. Such responsibility shall in no way be in derogation of the Contractor's other obligations under this Article 6.11.

6.12 Contractor's Documents

- **6.12.1** The Contractor shall prepare all Contractors' Documents. The Contractor shall submit to HCL's Representative and the Engineer-in-Charge
 - a) within such time as may be directed by HCL's Representative, those Contractor's Documents called for in the Contract or as HCL's Representative may require and in the numbers and format required by the Contract or, if no such number and format is stated in the Contract, as required by HCL's Representative; and
 - b) During the progress of the Works such additional Contractor's Documents within such times and in such numbers and format as HCL's Representative may reasonably require.
- **6.12.2** HCL's Representative shall review and comment on any Contractor's Documents submitted in accordance with Article 6.12.1 within 21 (twenty-one) Business Days after receipt of the Contractor's Document ("the **Review Period**"). HCL's Representative shall signify "no comment" or "comments made" or "resubmit" and return one copy of the Contractor's Document to the Contractor. If the Employer's Representative fails to so do within the Review Period, it shall be deemed that the Employer's Representative has signified "no comment".
- **6.12.3** The notes "no comment" or "comments made" will enable the Contractor to proceed on the basis of the Contractor's Documents provided that the Contractor fully addresses any comments made by the Employer Representative.
- **6.12.4** If, before reviewing and commenting on any design contained in any Contractor's Documents, the Engineer–in–Charge considers any change or modification is necessary to such Contractor's Documents, HCL's Representative may notify the Contractor accordingly whereupon the Contractor shall effect the same and re-submit the Contractor's Documents in accordance with this Article 6.12
- **6.12.5** Where any Contractor's Document is marked "resubmit" the same shall be amended, modified or prepared again, as the case may be, and resubmitted by the Contractor and the procedure set out in this Article 6.12 shall apply to the re-submitted Contractor's Document.

- **6.12.6** Notwithstanding any of the provisions of the Contract relating to the Contractor's Documents, the Contractor shall be fully responsible for:
 - a) The adequacy of the Contractor's Documents in accordance with the Contract; and
 - b) any failures of any Contractor's Documents whether to comply with the Contract and/or to meet its obligations there under or otherwise and for any ambiguities, failures, discrepancies, insufficiencies, lack of fitness for purpose, errors, omissions, design or construction impracticalities in any such Contractor's Documents howsoever such ambiguities, failures, discrepancies, insufficiencies, lack of fitness for purpose, errors, omissions, design or construction impracticalities may have arisen.
- **6.12.7** The Contractor shall at its own expense carry out any alterations or remedial work necessitated by reason of any ambiguities, failures, discrepancies, insufficiencies, lack of fitness for purpose, errors, omissions, design or construction impracticalities in any Contractor's Documents and shall modify the Contractor's Documents accordingly, or if the same be done by or on behalf of the Employer, the Employer shall be entitled to recover from the Contractor all costs reasonably incurred therein and may, without prejudice to any method of recovery, deduct the same from any moneys due or which may become due to the Contractor.
- **6.12.8** The Contractor is aware of the time required by HCL's Representative for the review of the Contractor's Documents and shall allow adequate time for such review. Furthermore, HCL's Representative shall not be obliged to comment upon any Contractor's Documents without first satisfying himself that to the extent required, such comment is issued with the consent, non-objection or approval of the Engineer-in-Charge or a Government Agency.
- **6.12.9** No design or execution of any part of the Works shall commence during the Review Period for those Contractor's Documents which are relevant to its design and execution except as may be expressly agreed in writing by HCL's Representative.
- 6.12.10 If the Contractor wishes to modify any Contractor's Document (including any design contained in Contractor's Documents) which has previously been reviewed by HCL's Representative, the Contractor shall immediately give notice to the Employer's Representative. Thereafter, the Contractor shall submit revised documents to HCL's Representative and the provisions of this Article 6.12 shall apply.
- 6.12.11 Save as expressly provided in this Contract, the Contractor shall not seek to recover from the Employer any loss or claim which may arise from the adoption, use or application by or on behalf of the Contractor or any other Person for whom the Contractor is responsible of the design in any Contractor's Documents.
- 6.12.12 No review, comment, suggestion, approval on any other communication by HCL's Representative made in accordance with the review procedure specified in this Article 6.12 shall relieve the Contractor of any of its obligations under the Contract.

HCL's OBLIGATIONS

In addition to and not in derogation or substitution of any of its other obligations under this Contract, HCL shall have the following obligations:

7.1 Specific obligations

HCL shall:

- a) Appoint/nominate the Engineer-in-Charge in accordance with Article 5.1 above.
- b) Instruct Engineer-in-Charge for carrying out all the obligations and exercise all the rights set out in **Schedule I.**
- c) Ensure that Engineer-in-Charge reviews and finalizes the Plan, Drawings and other documents within a reasonably time and in any case within the respective time specified elsewhere in this Contract.
- d) Provide to Contractor in accordance with the Plan, supply of specific items set out in **Schedule IV** upon exercise of the Contractor's option to obtain these utilities from HCL.
- e) Make payment of Contract Price in accordance with the provisions of this Contract.
- f) Grant in a timely manner, all such approvals, permissions and authorizations which the Contractor may require or is obliged to seek from HCL in connection with implementation of the Work and the performance of its obligations, under this Contract.
- g) Take all steps and make all applicable applications, filings, returns and reports for a license holder of a mine in accordance with the Applicable Laws to ensure compliance, expansion, operations and maintenance of the Work/Work Facilities.

7.2 General obligations

HCL shall:

- a) grant or where appropriate provide necessary assistance to the Contractor in securing all Applicable Permits;
- b) ensure peaceful use of the Work Site by the Contractor under and in accordance with the provisions of this Contract without any hindrance from HCL or any Governmental Agency or persons claiming through or under it/them;
- c) pay Dead Rent / Royalty, payment to District Mineral Fund (DMF), National Mineral Exploration Trust (NMET) and surface rent;
- d) Observe and comply with all its obligations set forth in this Contract.

CONTRACT PRICE

8.1 Contract Price

Subject to the provisions of this Contract and in consideration of undertaking to perform and discharge its obligations in accordance with the terms, conditions and covenants set forth in this Contract, HCL agrees and undertakes to make to the Contractor, the following payments ("Contract Price") as per the provisions of this Article:

a) Payment for work done

Payment for actual work done shall be for Scheduled Items and shall be at the rates against each respective item set out under **Schedule V** hereafter achieved and certified by Engineer-in-Charge during any Contract Payment Period.

The rates for payment set out in **Schedule V** shall be based on the mechanism set out under **Schedule VI** hereafter.

8.1.1 Payment for Supplies

Payment for the supplies which are required to be installed/ commissioned at the Project Site, shall be made in the following manner:

- i.Eighty percent (80%) on the supply of the utilities / equipment / machineries etc at the Project Site;
- ii. Twenty percent (20%) after successful commissioning of the utilities / equipment /machineries etc at the Project Site.

The Contractor shall be required to raise a separate bill for HCL to make payment for supplies.

8.1.2 Payment for drawings/design:

Payment for drawing/design under **Schedule V** shall be done after certified by Engineer-in-Charge during Contract Payment Period.

The Contractor shall be required to raise a separate bill for HCL to make payment for drawings.

8.2 Payment Mechanism

8.2.1 The contract price relating to each month shall be payable for actual work done by the contractor for the month through e-payment only as per format given in Schedule IX ("contract payment period"). Contractor shall submit the bill for the actual work done during a contract payment period to the engineer-in-charge on contract payment due date.

The bill shall be based on the Joint Measurement Certificate. Joint measurements of work completed during a month and cumulative shall be made on last day of each month and the results of such joint measurements should be recorded and jointly signed in a bound book.

Engineer-in-Charge shall certify the quantities and arrange for the payment of Contractor's bill after allowing adjustments for the supplies rendered HCL and for other deductions.

Payment of the work done shall be made by credit period of 30 days from the receipt of the bill for the month of completion of the job, after applicable deduction, if any. However no claim shall be entertained for any delay in payment. The R.A. bills should be submitted to the Engineer-in-Charge within three weeks of completion of work.

The payment for each month's actual work done shall be made after recovery of statutory deductions if any.

The Contractor will submit proof of depositing of provident fund of the previous month with the bills.

8.2.2 Joint measurement: Successful Bidder shall submit the bill for the work done during the previous months in accordance with the joint measurement to the Engineer-in-charge in the first week of every month. The results of such joint measurements should be recorded and jointly signed in a bound book. Engineer-in-charge shall certify the quantities and arrange for the payment of Successful Bidder's bill after allowing adjustments for the supplies and services rendered by the company and for other deductions.

All measurements shall be in metric system. All the work in progress will be measured by the representative of the Engineer-in-charge and the Successful Bidder's authorized agent progressively. For the purpose of taking joint measurement the Successful Bidder's representative shall be bound to be present whenever required by the Engineer-in-charge. If, however, he absents for any reason whatsoever the measurements will be taken by Engineer-in-charge or his representative and this will be deemed to be correct and binding on the Successful Bidder.

Withholding of payments to Contractor and HCL's lien on money due to the Contractor

Payments may at any time be withheld or reduced if, in the opinion of HCL, the Contractor is not diligently and efficiently endeavoring to comply with the terms of the Contract or if the Contractor should fail to pay wages to his labour or for material.

HCL shall have a lien on all amount that may become due and payable to the Contractor under this Contract or transaction of any nature whatsoever between HCL and the Contractor and the Performance Security furnished by the Contractor under the Contract or any sum that may become due and payable to the Contractor till the Contractor pays and clears the claim immediately on demand.

8.3 Withholding of payments to Contractor and HCL's lien on money due to the Contractor

Payments may at any time be withheld or reduced if, in the opinion of HCL, the Contractor is not diligently and efficiently endeavoring to comply with the terms of the Contract or if the Contractor should fail to pay wages to his labour or for material.

HCL shall have a lien on all amount that may become due and payable to the Contractor under this Contract or transaction of any nature whatsoever between HCL and the Contractor and the Performance Security furnished by the Contractor under the Contract or any sum that may become due and payable to the Contractor till the Contractor pays and clears the claim immediately on demand.

8.4 Final Payment and Release

On Completion the Engineer-in-Charge will issue a Completion Certificate to the Contractor on the application of the Contractor after satisfying himself (Engineer in charge) that the work has been completed in accordance with the contract documents and verifying from the following completion documents:

- (a) All surplus materials, rubbish, equipment etc are cleaned off the site completely.
- (b) The work has been measured,
- (c) All temporary works, labour and staff colonies/camp constructed are removed.
- (d) Performance Security, if any remaining after set-off by HCL of any amounts owed by the Contractor to HCL, and which amounts not having been paid by the Contractor to HCL,

Material appropriation statement for the material, if issued by HCL for the Work and list of surplus material returned to HCL's stores duly supported by necessary documents. If the contractor fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expenses of the contractor remove such surplus materials and rubbish and dispose off the same as he thinks fit. The contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials as aforesaid except for any sum actually realized by the sale thereof.

The Contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

After the issue of Completion Certificate by the Engineer-in-Charge as aforesaid and on the particulars contained therein and after getting the final bill for the work executed by the contractor, HCL shall determine the total value of the Work done by the Contractor and after adjusting all sums paid to him already or due to HCL, and such further sums as HCL may require to reserve or retain under the terms of the Contract, release eighty percent (80%) of the final payment due to the Contractor subject to undertaking given by the contractor. The remaining twenty percent (20%) of the outstanding final payment shall be paid by the HCL within seven (7) days after the expiry of the Period of Liability, provided that no set-offs are required to be made by HCL, during the Period of Liability, for remedying any work done by the Contractor under the Contract. Such final payment shall be made only when the Contractor furnishes to HCL an undertaking to the effect that Contractor has no further claim of whatever nature or description against HCL.

The Contractor should file no claim after final payment and HCL will not be liable to pay any money to the Contractor except as specifically provided for in the Contract. Acceptance by the

Contractor of the final payment as aforesaid shall release HCL from all acts of omission and commission by HCL or by the Engineer-in-Charge.

8.5 Variation in Schedule Items

The individual quantity indicated in **APPENDIX - X** may very up to any extent, but total value of the contract shall be restricted to plus 5%. However, any material required for stabilizing Production shaft disturbed area {refer clause 1.3.2.1 point 7 (iii)} which is not included in BoQ, will not be considered in 10% variation clause and rate of material, if required, will be decided mutually by Engineer in Charge, HCL and the successful bidder and payment will be made to the successful bidder based on the certification given by Engineer in Charge, HCL in this respect.

8.6 Liquidated Damage (LD)

Time is the essence of the contract. If the Successful Bidder is not able to achieve at least 90% of target of the work they shall be liable to pay liquidated damages on Quarterly basis.

The successful bidder has to submit a detailed bar chart during the mobilization period, giving the time schedule based on each activity, which has to be agreed upon both HCL and Successful Bidder. The liquidated Damage will be calculated based on this. However, the successful bidder will give the detailed activity chart in the beginning of the each year in line with total time period of the contract period for the purpose of performance monitoring and LD calculation.

Liquidated Damage will be levied on the Contractor, and calculated in the following manner:

For target of the individual work, shortfall will be calculated on the quarterly basis.

Any shortfall in achievement of quarterly target of the individual work will be communicated by Engineer-in-charge to the Successful Bidder. Failure to achieve the said target for any performance review period by the Successful Bidder shall make him liable to pay a Liquidated Damages from their running bills at the following rates:

Shortfall in Quarterly target	Rate of liquidated damage
Up to 10%	NIL
Above 10% but less than or equal to 20%	10 % of the shortfall value in Quarterly target
Above 20% but less than or equal to 40%	15 % of the shortfall value in Quarterly target
Above 40%	20 % of the shortfall value in Quarterly target

Also, HCL shall reconcile measurement of individual work done at the end of each financial year, and excess amount of LD, if found deducted from the bills of the successful bidder on quarterly basis during the financial year, shall be refunded to the successful bidder on achievement of 100% of the annual target.

The Successful Bidder can install the winders and start the work during mobilization period. The work done during this period will be considered for payment after mobilization period. There will be no target in the mobilization period. However, the achievement of mobilization period will be carried over to the achievement of first quarter.

The liquidated damage will be maximum 10% of the total awarded value.

However, if there is shortfall in the achievement due to such circumstances, which are under the control of HCL/KCC, liquidated damages will not be applicable & in that case, proportionate reduction in the monthly/quarterly target will be allowed.

Non-achievement of targets will, however, not attract any liquidated damages in case the same is established due to force majeure conditions as stipulated under the contract.

HCL shall have the right to adjust the Liquidated Damage which HCL may become entitled to from any amount payable by HCL to the contractor under the contract and in case no payment is due from HCL to the contractor, the contractor shall promptly and without demur or protest arrange remittance to HCL on demand.

If the delay in completion of execution of job is attributable to HCL, or due to a Force Majeure event, then Competent Authority may consider waiving of LD, provided the occurrence of the event is informed by notice to HCL, immediately thereof.

However in extension period, no escalation will be given to the contractor and no LD will be imposed in the extension period, if the delay is on account of contractor.

8.7 Situation when Reduction not leviable:

The Contractor is not liable to Reduction, if such Reduction is triggered on account of following events:

- (i) delay in delivery of the Work Site or any part thereof by HCL,
- (ii) suspension of Works or part thereof by HCL or the Engineer-in-Charge, for reasons not attributable to the Contractor,
- (iii) Change of Scope Order
- (iv) HCL Event of Default, and
- (v) Any other event as may be expressly notified by HCL during the Contract Period.

8.8 Payments for Emergency Works

In the event the Contractor, having executed Emergency Works beyond the Works for which rate have been indicated against Scheduled Item, and such Works are not part of the work and due to the nature of work being an Emergency, a Change of Scope Order has not been issued, payments for such works shall be arrived based on mutual discussions between the Parties subject to recording of such jobs to be done in a specified time which is to be indicated.

8.9 Taxes and Duties

(a) The Contractor agrees to and does hereby accepts full and exclusive liability for the payment of any and all taxes including Goods and Services Tax (GST) now or hereafter imposed, increased or modified, insurance and old age pensions or annuities now or hereafter imposed by any Central or State Government which are imposed with respect to or covered by the wages/salaries or other compensations paid to the persons employed by the Contractor. The Contractor shall be responsible for the compliance with all obligations and restrictions imposed by any applicable labour law or any other law affecting employer-employee relationship and the Contractor further agrees to comply, and to secure the compliance of all Contractor(s) if any, with all applicable Central, Municipal laws and regulations and requirements of any Central, State or local Government Agency or authority.

The statutory variation in taxes and duties shall be reimbursed / adjusted at actual on submission of proof of documentary evidence

(b) Taxes as applicable from time to time.

The rates at which Contract Price is arrived under **Schedule V** are excluding Goods and Services Tax (GST) which shall be reimbursed on production of Bill against which Input Credit can be taken.

The statutory variation in taxes and duties shall be reimbursed at actual on submission of proof of documentary evidence.

- **8.10 Tax deduction at source:** Income Tax, Works Contract Tax or any other statutory tax will be deducted at the time of payment at the prevailing rate as applicable from time to time.
- **8.11 Currency for payment**: All payments shall be made in Indian Rupee. Payment will not be made in any other currency..

FORCE MAJEURE

9.1 Force Majeure Events

9.2 If at any time during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reasons of war, act of hostility of public enemy, civil disruption or sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lock-outs or acts of God (here-in-after referred to as events), provided notice of the happening of any such eventuality is given by the either party to the other within 21 days from the date of occurrence thereof, neither party shall by reasons of such event be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non - performance or delay in performance / execution under this contract. Provided also that such performance/execution under the contract should commence as soon as practicable, after such event has come to an end or ceased to exist, and the decision of HCL as to whether the performance has been so resumed or not shall be final and conclusive. Provided further that if the performance in whole or in part or any execution under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may opt to terminate the contract. If the contract is terminated under this clause, HCL shall have liberty to take over from the contractor at a reasonable price, all unused, undamaged and acceptable materials, machinery, equipments, etc. at the site being used for the performance of the contract and in the possession of the contractor at the time of such termination of such portion thereof as HCL may deem it fit, except such materials, equipments, etc that the contractor may with the concurrence of HCL elect to retain. It is also understood in addition that this force Majeure clause will cover parties' inability to perform on account of change in law or imposition of rules or restrictions by the Government. Foreclosure of Contract Full or in Part

If at any time after acceptance of the TENDER, HCL shall decide to foreclose or reduce the scope of the Works and hence not require the whole or any part of the Work to be carried out, the Engineer-in-Charge shall give 10 days notice in writing to that effect to the Contractor, provided that:

In the event, any such action is taken by HCL, the Contractor shall be paid full amount for the up to date quantum of Work executed at Work Site as per billing schedule under the relevant items of Work under this Contract and in addition, a reasonable amount as certified by the Engineer-in-Charge or any other agency appointed by HCL for those supplied items which could not be utilized for execution of the Work to the full extent because of the foreclosure.

MATERIAL BREACH AND SUSPENSION

10 MATERIAL BREACH AND SUSPENSION

- 10.1 If the Contractor shall be in Material Breach of this Contract, HCL shall be entitled in its sole discretion and without prejudice to its other rights and remedies under this Contract including its right of Termination hereunder, to (i) suspend all or any of the rights of the Contractor under this Contract including payment of Contract Price by HCL and (ii) exercise the rights of the Contractor under this Contract itself or authorize any other person to exercise the same during such suspension. Such suspension by HCL shall be by a communication in writing to the Contractor and shall be effective forthwith upon the issue thereof to the Contractor. Provided, however, that the period of such suspension under this Article shall not exceed one hundred and twenty (120) days.
- 10.2 Subject to Article 10.1 above, HCL shall have the right to utilize the proceeds of Contract Price and Performance Security for meeting the costs incurred by HCL to remedy and rectify the cause of such suspension and for defraying the maintenance expenses during such suspension period. Provided, however, that if the Contractor is making diligent efforts to remedy and rectify such cause, then HCL shall allow the Contractor reasonable time and opportunity for such remedy or rectification.
- 10.3 The suspension of the rights of the Contractor by HCL pursuant to Article 10.1 above shall be revoked by HCL forthwith upon the Contractor having remedied the Material Breach during such suspension period to the satisfaction of HCL unless in the meantime this Contract has been terminated by HCL in accordance with Article 12.
- 10.4 At any time during the period of suspension under this Article, the Contractor may in writing notify to HCL that it does not intend to cure the breach or default that had caused such suspension. Within seven (7) days of receipt of such notice, HCL shall terminate this Contract as if a Material Breach of this Contract had occurred on account of a Contractor Event of Default.

EVENTS OF DEFAULT AND TERMINATION

11.1 Events of Default

The following events shall be termed as Events of Default:

If the Contractor shall not execute the contract in the manner as stipulated in the Contract or if the Contractor or of it, in the opinion of the HCL:

- (a) Does not execute the contract in conformity with the provisions of the Contract, or
- (b) Substantially suspends any part of its execution for a period of fourteen (14) days without authority from HCL, or
- (c) Fails to carry on and execute the Contract to the satisfaction of HCL or
- (d) Commits or permits any other breach of any of the provisions of the Contract (on the part of the Contractor to be performed or observed) or persists in any of the above mentioned breach of the Contract for fourteen (14) days, after notice in writing shall have been given to the Contractor by the HCL requiring such breach to be remedied, or
- (e) Abandon the Work(s), or
- (f) During the continuance of the Contract, becomes bankrupt, makes any arrangement or composition with its creditors, or permits any execution to be levied or goes into liquidation other than for the purpose of amalgamation or reconstruction; or
- (g) Does not perform as per the agreed programme submitted by the Contractor.

11.2 Termination due to Events of Default

- (a) If HCL decides to terminate this Contract, it shall in the first instance issue Preliminary Notice to the Contractor. Within 15 days of receipt of the Preliminary Notice, the Contractor shall submit to HCL in sufficient detail, the manner in which it proposes to cure the underlying Event of Default (the "Contractor's Proposal to Rectify"). In case of non submission of the Contractor's Proposal to Rectify within the said period of fifteen (15) days, HCL shall be entitled to terminate this Contract by issuing Termination Notice, and to appropriate any Security, if subsisting.
- (b) If the Contractor's Proposal to Rectify is submitted within the period stipulated thereof, the Contractor shall have to its disposal a further period of fifteen (15) days to remedy / cure the underlying Event of Default. If, however it fails to remedy/cure the underlying Event of Default within the stated period, HCL shall be entitled to terminate this Contract, and to appropriate the Security, if subsisting.

11.3 Rights of HCL on Termination

(a) HCL shall have the power to terminate the Contract and enter upon the Work(s) and take possession thereof and of the material, Temporary Works, Construction Plant, and stock thereon, and to revoke the Contractor's license to use the same, and to complete the Work(s) by its agents,

other contractor or workmen, or to re-let the same upon any terms and to such other Persons as HCL in its absolute discretion may think proper to employ and for this purpose use or authorize the use of any material, Temporary Works, Construction Plant, equipment, stock etc. as aforesaid without making payment or allowance to the Contractor for the said material, other than such as may be certified in writing by the Engineer-in-Charge to be reasonable, and if HCL shall by reason of its taking possession of the Work(s) or of the Work(s) being completed by other contractor (due account being taken on any such extra work or Works which may be omitted) incur any extra cost then the amount of such excess as certified by the Engineer-in-Charge shall be deducted from any money which may be due for Work done by the Contractor under the Contract and not paid for and/or Performance Security. Any deficiency shall forthwith be made good and paid to HCL by the Contractor and HCL shall have power to sell in such manner and for such price as it may think fit, all or any of the Construction Plant, material etc. constructed by or belonging to and to recoup and retain the said deficiency or any part thereof out of the proceeds of the sale.

- (b) The money that may have been due to the Contractor on account of Work executed by it shall not be payable to the Contractor before the expiry of six (6) calendar months reckoned from the date of Termination of the Contract or from the taking over the Work or part thereof by HCL as the case may be, during which period the responsibility for faulty materials or workmanship in respect of such Work under the Contract will be exclusively with the Contractor and such money shall be subject to deduction of all amount due from the Contractor to HCL, whether under the terms of the Contract or otherwise, or required to be retained by HCL.
- (c) The rights and remedies of HCL as per this Article shall not constitute as limitation of Contractor's liabilities but shall be exclusive and in addition to any other rights and remedies provided under the Contract or by law for the time being in force.
- (d) Any waiver by HCL of any breach of the terms or conditions of the Contract shall not constitute a waiver of any subsequent breach of the same.
- (e) Any failure by HCL at any time or from time to time to enforce or require strict performance by the Contractor of any of the terms and conditions of the Contract, shall not constitute a waiver by HCL of a breach of any such terms or conditions and shall not affect or impair such terms or conditions in any way or the right at any time to avail himself of such remedies as it may have for any such breach or breaches of such terms or conditions.
- (f) Failure to enforce any condition herein contained shall not operate as a waiver of the condition itself or any subsequent breaches thereof.

11.4 Rights of Parties

Notwithstanding anything to the contrary contained in this Contract, Termination pursuant to any of the provisions of this Contract shall be without prejudice to accrued rights of either Party including its right to claim and recover money, damages and other rights and remedies which it may have in law or contract. The rights and obligations of either Party under this Contract,

including without limitation those relating to Termination Payment, shall survive the Termination but only to the extent such survival is necessary for giving effect to such rights and obligations.

11.5 Termination Payments

In the event, any such action is taken by HCL, the Contractor shall be paid full amount for the up to date quantum of Work executed at Work Site as per billing schedule under the relevant items of Work under this Contract.

DIVESTMENT OF RIGHTS AND INTERESTS

12 DIVESTMENT OF RIGHTS AND INTERESTS

- **12.1** Upon Termination of this Contract, the Contractor shall comply with the following:
- (a) notify to HCL forthwith the location and particulars of all Work Facilities;
- (b) deliver forthwith actual or constructive possession of the Work Site and Work Facilities free and clear of all Encumbrances and execute such deeds, writings and documents as may be required by HCL for fully and effectively divesting the Contractor of all of the rights, title and interest of the Contractor in the Work Facilities free of any charge or cost to HCL; and
- (c) comply with the divestment requirements set out in Article 12.2 below.
- 12.2 Upon Termination of this Contract, the Contractor shall comply and conform to the following Divestment Requirements in respect of the Work Facilities:
- (a) all Work Facilities including the equipment, roads, pavements, shall have been renewed and cured of all defects and deficiencies as necessary so that the Facilities are compliant with the Work Requirements set forth in this Contract;
- (b) the Contractor delivers relevant records and reports pertaining to the Work;
- (c) the Contractor executes such deeds of conveyance, documents and other writings as HCL may reasonably require to convey, divest and assign all the rights, title and interest of the Contractor in the Work Facilities free from all Encumbrances absolutely and free of any charge or tax unto HCL or its nominee; and
- (d) the Contractor complies with all other requirements as may be prescribed under Applicable Laws to complete the divestment and assignment of all the rights, title and interest of the Contractor in the Work free from all Encumbrances absolutely and free of any charge or tax to HCL or its nominee.
- 12.3 Not earlier than three (3) months before the expiry of the Contract Period but not later than thirty (30) days before such expiry, or in the event of earlier Termination of this Contract, immediately upon but not later than fifteen (15) days from the date of issue of Termination Notice, the Engineer-in-Charge shall verify, in the presence of a representative of the Contractor, compliance by the Contractor with the divestment requirements in relation to the Work Facilities and, if required, cause appropriate Tests to be carried out at the Contractor's cost for determining the compliance therewith. If any shortcomings in the divestment requirements are found by either Party, it shall notify the other of the same and the Contractor shall rectify the same at its cost.
- 12.4 Upon the Contractor conforming to all divestment requirements and handing over actual or constructive possession of the Work Site to HCL or a person nominated by HCL in this regard, HCL shall issue a certificate (the "Vesting Certificate") within one month of Contractor conforming to all divestment requirements and handing over actual or constructive possession of

the Work Site and Work Facilities to HCL, which will have the effect of constituting evidence of divestment of all rights, title and lien in the Work Site and Work Facilities by the Contractor and their vesting in HCL pursuant hereto. Issue of the Vesting Certificate shall not be unreasonably withheld by HCL. The divestment of all rights, title and lien in the Work shall be deemed to be complete on the date when all the divestment requirements have been fulfilled and Vesting Certificate has been issued, it being expressly agreed that any defect or deficiency in any divestment requirement shall not in any manner be construed or interpreted as restricting the exercise of any rights by HCL or its nominee on or in respect of the Work on the footing as if all divestment requirements have been complied with by the Contractor.

MODE OF PAYMENT BY HCL

13.1 Mode of Payment

The	Contractor	hereby	expressly	authorizes	HCL	to	make	payment	of	Contract	Price,
Term	ination Pay	ment, if	any, and a	ny other pa	ayment	wh	ich bed	comes pay	able	by HCL	to the
Cont	ractor under	this Co	ntract direc	etly to the o	eredit o	of su	ich bar	nk account	at		,
(Desi	ignated Acc	ount), an	d/or to ma	ke/issue and	d delive	er cl	neques,	drafts or	othe	er instrum	ents in
respe	ect of such pa	ayments	in favour o	f a bank at _			(Desig	nated Banl	k).		

Payment will be made through e-mode for which Bank Mandate Form, as given in **Schedule-IX**, duly filled up has to be submitted by the successful bidder.

13.2 Valid Discharge

The Contractor hereby agrees, undertakes and confirms that;

- (a) the payment to the credit of the Designated Account or to the Designated Bank shall be made by HCL notwithstanding any instructions to the contrary issued or disputes raised by the Contractor.
- (b) any payment made in accordance with Article 13.2 (a) shall be valid and HCL shall, to the extent of the payment so made, be relieved and discharged of all its obligations in respect of such payments under this Contract. Provided no such discharge shall prejudice any claim which the Contractor may have against the Lenders.

ARTICLE - 14 DISPUTE RESOLUTION

14.1 Amicable Resolution

- (a) Save where expressly stated to the contrary in this Contract, any dispute, difference or controversy of whatever nature between the Parties, howsoever arising under, out of or in relation to this Contract including disputes, if any, with regard to any acts, decision or opinion of the Engineer-in-Charge and so notified in writing by either Party to the other (the "**Dispute**") shall in the first instance be attempted to be resolved amicably in accordance with the procedure set forth in part (b) below.
- (b) Either Party may require such Dispute to be referred to the work in charge of HCL and the Contractor for amicable settlement. Upon such reference, the two shall meet at the earliest as per their mutual convenience and in any event within fifteen (15) days of such reference to discuss and attempt to amicably resolve the Dispute. If the Dispute is not amicably settled within fifteen (15) days of such meeting, either Party may refer the Dispute in accordance with the provisions of part (c) below.
- (c) In the event that any Dispute has not been resolved as per the provisions of (b) above, the same shall be referred to the director or a person of equivalent designation, of HCL and the Contractor for amicable settlement. Upon such reference, the two shall meet at the earliest as per their mutual convenience and in any event within fifteen (15) days of such reference to discuss and attempt to amicably resolve the Dispute. If the Dispute is not amicably settled within fifteen (15) days of such meeting between the two, either Party may refer the Dispute to arbitration in accordance with the provisions of Arbitration clause.

14.2 Arbitration

All question(s), dispute(s) or difference(s) of any kind whatsoever arising out of, or relating to the contract shall be referred by the parties to this contract for decision within 30 days from the occurrence of difference or the dispute, to a Sole Arbitrator.

The venue of the arbitration shall be Kolkata only. The award of the arbitrator shall be final and binding on the parties.

Subject to the above, the provision of Arbitration and Conciliation Act, 2015 and the rules there under and the statutory modifications thereof shall govern such arbitration proceedings and shall be deemed to apply and be incorporated in this contract.

Any dispute, if arises at any point of time out of arbitration shall have jurisdiction of the Court of Kolkata, West Bengal.

CHANGE OF SCOPE

Change of Scope

HCL may, notwithstanding anything to the contrary contained in this contract, require a change in the scope of the Project (Change of Scope), provided that such change does not involve a variation of more than plus/minus ten (10) percent of the cost of the project. The Change of Scope may be required by HCL by an order (the Change of Scope Order) issued in accordance with the procedure set forth in Article 8.2.

For the purpose of this contract, a change would be considered as Change of Scope if the said change is not covered within the scope of work, scheduled Items (as listed under **APPENDIX - X**

) and is also not related to Emergency Works.

Procedure for Change of Scope

- (a) HCL may, at any time during the Contract Period require Change of Scope by a written notice (the Change of Scope Notice) to the Contractor, through the Engineer-in-Charge.
- (b) The Contractor shall within fifteen (15) days of receipt of Change of Scope Notice, provide to the Engineer-in-Charge such information as is necessary and reasonable together with preliminary documentation and details including calculations where necessary, in support of the following:
 - i. The impact which the Change of Scope is likely to have on the Project Requirements and Expansion Plan,
 - ii. The estimate of the Additional Cost to be incurred by the Contractor for implementing the Change of Scope, and
 - iii. The additional time (number of days) that the Contractor would require to complete the Change of Scope.
- (c) The Engineer-in-Charge shall after reviewing the information, documentation and the budgeted estimate of the Additional Cost submitted to it pursuant to Article 8.2 (b), settle the rates, approve the quantities/ design and forward the budgeted estimate of the Additional Cost as duly certified by it in consultation with the contractor, to HCL. HCL may after review of such statement issue the Change of Scope Order. The final additional cost shall be computed by taking into account the actual work executed as measured and certified by the Engineer-in-Charge at the rates settled.
- (d) If for any reason HCL chooses not to issue the Change of Scope Order, it shall reimburse to the contractor the cost/expenses certified by the Engineer-in-Charge as having been incurred by the contractor in preparing and submitting the drawing

- (e) Plans, documents, estimates and other information in compliance with the Change of Scope Notice.
- (f) Simultaneously with the issue of the Change of Scope Order, HCL shall notify the contractor the mode of payment for the Additional Costs and upon such notification the Change of Scope Order shall be effective HCL shall, within fifteen (15) days from the date of receipt of a certificate from the Engineer-in-Charge certifying that the contractor has completed the works in accordance with the Change of Scope Order, reimburse to the contractor the Additional Cost as per pre specified terms and conditions.

ARTICLE 16

REPRESENTATIONS AND WARRANTIES, DISCLAIMER

16.1 Representations and Warranties of the Contractor

The Contractor represents and warrants to HCL that:

- (a) it is duly organised, validly existing and in good standing under the laws of India;
- (b) it has full power and authority to execute, deliver and perform its obligations under this Contract and to carry out the transactions contemplated hereby;
- (c) it has taken all necessary corporate and other action under" Applicable Laws and its constitutional documents to authorise the execution, delivery and performance of this Contract;
- (d) it has the financial standing and capacity to undertake the Project;
- (e) this Contract constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof;
- (f) it is subject to civil and commercial laws of India with respect to this Contract and it hereby expressly and irrevocably waives any immunity in any jurisdiction in respect thereof;
- (g) the execution, delivery and performance of this Contract will not conflict with, result in the breach of, constitute a default under or accelerate performance required by any of the tenms of the Contractor's Memorandum and Articles of Association or of any member of the Consortium or any Applicable Laws or any covenant, agreement, understanding, decree or order to which it is a party or by which it or any of its properties or assets are bound or affected;
- (h) there are no actions, suits, proceedings or investigations pending or to the Contractors knowledge threatened against it at law or in equity before any court or before any other judicial, quasi judicial or other authority, the outcome of which may constitute Contractor Event of Default or which individually or in the aggregate may result in Material Adverse Effect:
- (i) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Agency which may result in Material Adverse Effect;
- (j) it has complied with all Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have Material Adverse Effect;
- (k) subject to receipt by the Contractor from HCL of the Termination Payment, if any, and any other amount due under any of the provisions of this Contract, in the manner and to the extent provided for under the applicable provisions of this Contract, all rights and interests of the Contractor in and to the Project I Project Facilities shall pass to and vest in HCL on the

- Termination Date free and clear of all Encumbrances without any further act or deed on the part of the Contractor or HCL;
- (l) no representation or warranty by the Contractor contained herein or in any other document furnished by it to HCL or to any Government Agency in relation to Applicable Permits contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading; and
- (m)no bribe or illegal gratification has been paid or will be paid in cash or kind by or on behalf of the Contractor to any Person to procure the Contract.

Without prejudice to any express provIsion contained in this Contract, the Contractor acknowledges that prior to the execution of this Contract, the Contractor has after a complete and careful examination made an independent evaluation of the Project Site, Project Requirements and the information provided by HCL, and has determined to its satisfaction the nature and extent of risks and hazards as are likely to arise or may be faced by the Contractor in the course of performance of its obligations hereunder. The Contractor also acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth above and hereby confirms that HCL shall not be liable for the same in any manner whatsoever to the Contractor.

16.2 Representations and Warranties of HCL

HCL represents and warrants to the Contractor that:

- (a) it has full power and authority to grant the Contract;
- (b) it has taken all necessary action to authorise the execution, delivery and performance of this Contract
- (c) this Contract constitutes HCL's legal, valid and binding obligation enforceable against it in accordance with the terms hereof.
- (d) There are no suits or other legal proceedings pending or threatened against HCL in respect of the Project Site or the Project.

16.3 Obligation to notify change

In the event that any of the representations or warranties made/given by a Party ceases to be true or stands changed, the Party who had made such representation or given such warranty shall promptly notify the other of the same.

16.4 Period of warranty and guarantee:

The period of warranty and guarantee shall be 18 (Eighteen) months for the equipment/machinery supplied by the

Contractor. This excludes consumables, wear parts, rubber parts and damages by abnormal usage.

ARTICLE - 17 MISCELLANEOUS

17.1 Assignment and Charges

- (a) Subject to Articles 15.1 (b) and Article 15.1 (c) herein below, neither Party shall assign this Contract or the rights, benefits and obligations hereunder save and except with prior consent of the other Party.
- (b) Except as provided in Article 15.1 (c) herein below, the Contractor shall not create nor permit to subsist any Encumbrance over or otherwise transfer or dispose of all or any of its rights and benefits under this Contract except with prior consent in writing of HCL, which consent HCL shall be entitled to decline without assigning any reason whatsoever.
- (c) Restraint set forth in Article 15.1 (a) and Article 15.1 (b) above shall not apply to:
 - (i) liens/Encumbrances arising by operation of law (or by an agreement evidencing the same) in the ordinary course of business of the Contractor;
 - (ii) mortgages/pledges/hypothecation of goods/assets other than Work Site, as security for indebtedness, in favour of the Lenders and working capital providers for the Work;
 - (iii) assignment of Contractor's rights and benefits under this Contract to or in favour of the Lenders as security for financial assistance provided by them.

17.2 Indemnity

- (a) The Contractor shall at all times, indemnify and keep HCL and the Engineer-in-Charge indemnified against any claim and hold them harmless from any and all liabilities for death, bodily injury and/or damages resulting from or arising out of or in any way connected with the operations covered by the Contract. The Contractor shall be responsible for all risks arising in connection with or on account of the operations covered under the Contract and it shall make good all losses and damages arising there from. In case HCL or the Engineer-in-Charge incurs any cost, expense or loss on account of any claim, demand or cause of action brought against them and arising out of the operations covered by the Contract, HCL shall recover such cost, expense or loss from the Contractor. HCL shall have power, without being bound to do so, to defend, contest or compromise any such claim, demand or cause of action and any amount that may become payable by HCL and any expense that may be incurred by HCL in this behalf, shall also be recoverable from the Contractor.
- (b) The Contractor shall, at all times, indemnify and keep indemnified HCL and the Engineer-in-Charge and hold them harmless against any claim or demand which may be made, arising out of any use of existing patents, or alleged infringement of such patent or of other patent rights committed by the Contractor in carrying out the operations covered by the Contract and against all liabilities in respect thereof, and against all acts, suit proceedings, claim, cost and expense whatsoever, which may be lodged against or incurred and become payable by HCL in respect thereof.

17.3 Governing Law and Jurisdiction

This Contract shall be governed by the laws of India. The courts at Khetri, India shall have jurisdiction over all matters arising out of or relating to this Contract.

17.4 Waiver

- (a) Waiver by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Contract:
 - (i) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions or obligations under this Contract;
 - (ii) shall not be effective unless it is in writing and executed by a duly authorised representative of such Party; and
 - (iii) shall not affect the validity or enforceability of this Contract in any manner.
- (b) Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Contract or any obligation hereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver/breach of any terms, conditions or provisions of this Contract.

17.5 Survival

Termination of this Contract shall not relieve the Contractor or HCL of any obligations except as otherwise provided in this Contract or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

17.6 Confidentiality

The Contractor shall at all time keep confidential all oral and written information relating directly or indirectly to the Work; either disclosed to the Contractor by/or on behalf of HCL; or acquired by the Contractor during the course of performance of the Contract. The Confidential Information shall be held in strict confidence and used only for purposes of this Contract. The Contractor shall not disclose such information to any third party without HCL's prior written approval. If the Contractor is required to disclose any confidential information by operation of law, the Contractor shall notify HCL immediately and shall cooperate in seeking a reasonable protective order. Any contravention of the provision of this Article will tantamount to breach of the Contract.

17.7 No Third Party Rights

This Contract and all rights hereunder are intended for the sole benefit of the Parties hereto and, to the extent expressly provided in this Contract, for the benefit of the Lenders and, except as set forth in the Contract, it shall not imply or create any rights on the part of, or obligations to, any other entity or individual.

17.8 Amendments

This Contract and the schedules together constitute a complete and exclusive understanding of the terms of the Contract between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless agreed to by all the Parties hereto and evidenced in writing.

17.9 Notices

Unless otherwise stated, notices to be given under this Contract including but not limited to a notice of waiver of any term, breach of any term of this Contract and Termination of this Contract, shall be in writing and shall be given by hand delivery, recognized international courier, mail, telex or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below:

If to HCL		
If to the Contractor		

Or such address, telex number, or facsimile number as may be duly notified by the respective Parties from time to time, and shall be deemed to have been made or delivered (i) in the case of any communication made by letter, when delivered by hand, by recognized international courier or by mail (registered, return receipt requested) at that address and (ii) in the case of any communication made by telex or facsimile, when transmitted properly addressed to such telex number or facsimile number.

17.10 Severability

If for any reason whatsoever any provision of this Contract is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties shall negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be subject to dispute resolution under this Contract or otherwise.

17.11 No Partnership

Nothing contained in this Contract shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever.

17.12 Language

All notices required to be given under this Contract and all communications, documentation and proceedings which are in any way relevant to this Contract shall be in writing and in English language.

17.13 Exclusion of Implied Warranties etc.

This Contract expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by any Party not contained in a binding legal agreement executed by the Parties.

17.14 Counterparts

This Contract may be executed in two counterparts, each of which when executed and delivered shall constitute an original of this Contract but shall together constitute one and only the Contract.

IN WITNESS WHEREOF THE, PARTIES HAVE EXECUTED AND DELIVERED THIS CONTRACT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

For and on behalf of HCL by:	For and on behalf of CONTRACTOR	
Signature:	Signature:	
Name:	Name:	
Designation:	Designation:	
Seal:	Seal:	
In the presence of:	In the presence of:	
1)	1)	

SCHEDULE - I

ENGINEER IN CHARGE

PART A - RIGHTS AND OBLIGATIONS OF ENGINEER-IN-CHARGE

Engineer-in-Charge shall be the officer as may be designated, deputed or authorized, by HCL for the purpose of the Work with the following rights and obligations:

- 1. Co-ordination with the various agencies/ contractors engaged in the Work Site and ensures minimum interference among such agencies/ contractor.
- 2. Ensure exchange of technical information with the Contractor in order to complete the Work economically with full efficiency.
- 3. Ensure smooth sharing of certain facilities, if any, among various contactors, inter se.
- 4. Take cognizance of changes (leave/travel) in Work Managers or other key personnel of the Contractor.
- 5. In case of emergency/ contingency situations, execute work which are under scope of Contractor and the Contractor is unwilling or unable to execute the same
- 6. Review and record daily progress reports (containing details of progress of execution of the work, resources deployed, etc) prepared by Contractor.
- 7. Issue necessary instructions for Work for which specifications/ drawings have not been prescribed or issued by HCL. The instructions shall include execution of all details which shall cover incidental works whether temporary or permanent, which must evidently, required by reasons of the nature of the Works included in the Contract and are to be carried out by the Contractor in all respect.
- 8. Review and approve drawings, prints, articles, machinery or fabricated materials of work entering into or forming part of the permanent construction prepared by the Contractor, specifications/ details of which are not provided by HCL in advance.
- 9. Direct the Contractor to repair or replace the materials in case the same was issued by HCL and has been damaged or lost by the Contractor.
- 10. In case of delay in execution of Work by Contractor on account of non-procurement of certain material, issue such materials if available with HCL at the risk and cost of the Contractor.
- 11. Authorize the Contractor for the utility of materials for manufacturing the items which can be obtained from manufacturer in finished form.
- 12. Issue necessary directions to Contractor for execution of an indemnity bond in the prescribed form for the safe custody and accounting of the all materials issued by HCL.
- 13. Issuing materials at his own discretion from HCL's site store (however any item issued from the site store has to be recorded and regularized from the central store).
- 14. Inspection of the materials used by the Contractor during the work process in the Work Site.

- 15. For the fabrication of the items required for the work, issue prior permission to remove the materials (in case of damage or waste).
- 16. During the transportation of the materials to the Work Site of erection, issue instructions prior to their actual erection and ensure that the things are not left lying around indefinitely.
- 17. Ensure that the staff employed by Contractor are as per the technical proposal of the Contractor and have valued qualifications and are efficient to perform the work
- 18. Periodically reviewing on time to time basis the attendance of a Work Manager or a contactor in the site of the work.
- 19. Take decision on the strata whether the ground qualifies to be termed as "bad ground", and if the ground is liable to be termed as such, then have discussions with Contractor to finalize the minimum over break.
- 20. Approving and ensuring the levels and alignment of grouting below base plates.
- 21. Testing, commissioning and approving the machinery and equipments during installation and assembling in the company.
- 22. Provide guidance to Contractor, in case of erection of fencing and barricades during execution of the work.
- 23. Enjoy accessibility of the records of all pours showing dates, quantities, locations, weather, and temperature conditions, a tabulation of the code numbers of all test cylinders cast and the result of all slump tests.
- 24. Issue written approval in case of proposal from Contractor for use of any kind of additives.
- 25. On routine basis measurement and inspection of the lines and grades for the better and accurate result.
- 26. Check and approve all lines, levels, benches and gradients
- 27. If required, direct removal of survey stations

PART B - Power of the Engineer-In-Charge to Order Suspension of Work:

The Engineer-in-Charge may, as he deems fit, by giving directions in writing and without invalidating the Contract, order the Contractor to suspend the Work or any part hereof for such time and for such reasons, as he may consider necessary. The Contractor shall not, after such directions to suspend the Work or any part thereof has been given, proceed with the Work or part thereof until he receives a written order from the Engineer-in-Charge to do so. In the event of such suspension, the Employer may, under the provision of the Contract, extend the time for Completion of the Work or part thereof by such period as it may consider reasonable, provided the suspension is not due to violation of regulations by Contractor. The decision of the Employer in the matter shall be final and binding on the Contractor.

The Work or any part thereof shall not be suspended by the Contractor in any circumstance without prior knowledge and approval of the Engineer-in-Charge excepting accident(s) involving

loss of life or serious bodily injury. If the Contractor proposes to suspend the Work or any part thereof, he should report to the Engineer-in-Charge furnishing the reasons necessitating such suspension(s) of Work in detail, and should obtain his prior written order before such suspension(s).

If it appears to the Engineer-in-Charge that any Work has been executed with unsound, imperfect or unskillful workmanship or with material or articles of unsound or of a quality inferior to the requirement of the Contract, the Contractor shall on order in writing from the Engineer-in-Charge, rectify or remove and reconstruct the Work forthwith so specified in whole or in part as the case may be, remove the material or articles at his own cost notwithstanding that the same may have been passed, certified and paid for. In the event of his failing to do so within a period as specified by the Engineer-in-Charge in his aforesaid order then the Engineer-in-Charge may rectify, remove, reconstruct and/or re-execute the Work or remove and replace with other material or articles as the case may be at the risk and cost of the Contractor.

Inspection of work:

- 1. The Engineer-in-charge/Mines Manager or his representative which includes HCL's Surveyor and his staff, will have full power and authority to inspect the work at any time wherever work is in progress either on the site or at the Successful Bidder's premises/ workshop wherever situated, premises/ workshops of any person, firm or corporation where work in connection with the Contract may be in hand or where material are being or are to be supplied and the Successful Bidder shall afford or procure for the Engineer-in-charge or his representative every facility and assistance to carry out such inspection. The Successful Bidder shall at all time during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his representative to visit the works shall have been given to the Successful Bidder, either himself be present to receive orders and instructions or have a responsible officer duly accredited in written be present for the purpose.
- 2. No material shall be dispatched from the Successful Bidder's stores before obtaining the approval in writing of the Engineer-in-charge. The Successful Bidder is to provide at all times during the progress of work and the maintenance period proper means of access with ladder, gangways, etc. and the necessary attendance to move and adopt as directed for inspection or measurement of the work by the Engineer-in-charge.
- 3. The Successful Bidder shall make available to the Engineer-in-charge or his representative which includes HCL's Surveyor and his staff, free of cost all necessary instrument and assistance in checking or setting out of works and in checking of any works made by the Successful Bidder for the purpose of setting out and taking measurement of work.

SCHEDULE - II

CONDITIONS FOR EMPLOYMENT OF LABOUR

- 1. The Successful Bidder shall intimate the number of persons likely to be engaged by him for the performance of the contract to the Engineer-in-charge of HCL. The Successful Bidder shall frame his manpower lay out within men on roll including officials.
- 2. The Contractor shall carry out its operations in strict compliance of its obligations under the provisions of Contract Labour (Regulation and Abolition) Act, 1970 and various notifications issued from time to time under the act. The Successful Bidder will not start the work and payment will not be released unless he obtained the license required under the Contract Labour (Regulations and Abolition) Act 1970 and Rules framed there under.
- 3. The workers engaged by the Contractor shall be on its roll. The Contractor shall ensure that all labour engaged by the Contractor, whose assistance the Contractor has taken with prior written approval of HCL, shall be properly trained and qualified craft persons. The Contractor shall pay all their wages, other dues and benefits and shall abide by the Applicable Laws relating to employment of labour like Payment of Wages Act, Minimum Wages Act, Workmen's Compensation Act, Contract Labour (Abolition and Regulation) Act, and Workmen's Health Insurance etc.
- 4. The Contractor shall maintain all records required under the Applicable Laws relating to employment of workers in general and to Mine workers. HCL shall have the right to inspect all such records and the Contractor shall have the obligation to rectify all omissions and commissions relating to these records.
- 5. The Contractor shall, at its cost provide all facilities including medical facilities, canteen, training centre, recreation facilities etc. as may be required by the Applicable Laws or otherwise.
- 6. For employment of skilled/semi skilled/unskilled labour the Contractor will give preference to local people.
- 7. When so required by HCL, the Contractor shall furnish certificate of qualifications and experience of all workers employed by the Contractor, whose assistance it has sought with the prior written approval of HCL, and HCL, if so required by law, retain these certificates in its custody.

8. **Social Security Acts:**

A. Deduction of P.F., Family Pension & E.C. Act. Etc.

The Contractor shall comply with the provision of Employee Provident Fund and Miscellaneous Provision Act, 1952 and schemes and rules etc, framed there under and Employee Compensation Act1923, and the rules etc., framed there under and all other laws of the land application to the employees of the Contractor. Those Contractor who has no own PF Establishment code shall deposit PF Contribution in KCC PF Trust and Pension Fund etc. through HCL/KCC through

Bank Draft or Banker Cheque through HCL/ KCC on or before 12th of the following months as per details given below:-

Sl.	Pay to	On Account of		
1	PF Trust, Khetri Copper Complex	15.67% on account of PF + 1.1% admin. Charges		
2	Hindustan Copper Limited, Khetri	8.33% Pension Fund + 0.5% EDLI Charges +		
	Copper Complex	0.005% EDLI Insp. Charges		

Those who fail to deposit the EPF with in stipulated period can be penalized under provision of Employee Provident Fund Act, 1952. Contractors those who have their own PF Establishment Code shall submit the Copy of bank challan as a proof of Depositing PF & Pension fund etc. to the respective RPFC along with Form 6A & 3A for the last Financial Year. The Contractor must submit Form 6A & 3A for the current financial year with in the stipulated period and SD will be released only after receipt of copy of Form 6A & 3A. In the event of failure on the part of the Contractor to deposit provident fund and pension fund, the company shall recover the same from the bills of the Contractor together with any other charges / penalty leviable for the said default of the Contractor and directly deposit the provident fund with HCL/ KCC employees provident fund and family pension with the appropriate authority.

The Contractor shall at all times indemnify the company against all claims, damages, compensation etc. that might be paid or become payable by the company under the said Employees Provident Fund and Miscellaneous Provision Act, 1952 and Employee's Compensation Act 1923 and all other labour, industrial and other laws of the land applicable to the employees engaged by the Contractor. Before commencement of the work, the Contractor must submit the copy of insurance covered under Employee's Compensation Act, 1923 of his labours going to be deputed under this Work Order in Central Human Resource Deptt., and then only they will be allowed to start the work.

B. Wages to the Labour:

Party will abide by laws with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Contract Labour (Regulation & Abolition) Act, 1970 etc. and also provisions of any other law as may be applicable from time to time. Wages of any kind i.e. Salary, Over Time, Bonus, and Advance or on any other account whatever shall be paid, through bank account only. Cash payment will not be allowed in any circumstance whatever the reason there may be.

SCHEDULE - III

CONDITION FOR ENVIRONMENT, HEALTH & SAFETY MANAGEMENT

1. Environment, Health and Safety Management

During the entire Contract Period, the Contractor shall observe and abide by the general guidelines and specific guidelines on environment, health and safety applicable to mining works in accordance with Applicable Laws and Good Industry Practices.

2. Environment

- 2.1 During the entire Contract Period, the Contractor's men and equipment shall conform to the provisions of all directions and orders issued by HCL in respect of environment protection.
- 2.2 The Contractor shall abide by and perform all Works in accordance with all applicable environmental laws, regulations and permits in force.
- 2.3 If after the execution of this Contract, any change in the Work or additional work is required due to new environmental laws and regulations not previously applicable to the Work, the Contractor and HCL shall agree upon the changes required and Additional Cost, if any. An addendum to the Contract will be executed incorporating the required changes and additional price, if any.

3. Safety

- 3.1 The Contractor shall, at all times, exercise all reasonable precautions for the safety of its personnel and employees/workers in the performance of its obligations under the Contract and shall comply with all lawful instructions of HCL and/or DGMS or other authority relating to safety in general and in particular to the safety of the Mine and its operations and safety of all persons engaged in the Mine and shall abide by all applicable provisions of the safety laws drawn up by the DGMS, GOR or GOI or municipalities and other authorities in India and shall provide all facilities and gadgets required for the purpose. Any compensation to be paid to the workers/employees or others on any account including failure to observe safety laws shall be the responsibility of the Contractor. In case of non-compliance by the successful bidder, the same may be provided by HCL at the successful bidder's cost
- 3.2 The contractor shall be responsible for implementation of safety rules as per good industry practices and applicable laws and directions of DGMS.
- 3.3 Special precautions should be taken while deploying workers in the mine. Before employing any labour to the mine proper vocational training should be imparted and all rules and regulations in that regard should be strictly followed and shall ensure that:
 - 3.3.1 No person/vehicle shall be deployed at any place other than authorized place.
 - 3.3.2 All workers should obey lawful instructions of mine management.
 - 3.3.3 All drivers shall obey systematic traffic rules prepared by management.
- 3.4 Before deployment of the workers, they must be trained and briefed about safety aspects in a mine. However during course of execution of the work, if any accident occurs whether major or

minor, the matter shall have to be immediately informed to mine management so that Notices of accidents in accordance of the statutes (Reg. 9 of MMR 1961) be given and other necessary steps may be taken in accordance of the Mines Act 1952 and other relevant laws.

- 4. Supervision of the work by the Successful Bidder and the Successful Bidder's agent and his supervising staff at the work site:
 - a) Second phase expansion is an inherent part of the Khetri Mine statutorily under the control of Mine Manager and Agent of the Khetri Copper Mine.
 - b) Regarding statutory supervision, the Successful Bidder and HCL management shall frame out a policy to comply with the provisions of MMR1961. However, for execution, supervision and control of the Contract, Successful Bidder shall deploy statutory qualified supervisors and officials experienced in the field of Metal Mining in all the three shifts of operation.
 - c) The Successful Bidder shall name and depute a qualified person having sufficient experience in carrying out work of similar nature, which the instructions for work are given.
 - d) The Successful Bidder shall keep at all time on the work site while the work is in progress, a properly qualified and competent Project Manager, duly authorized and empowered to act for him and to receive on his behalf all such notices and communications as the company and/or the Engineer-in-charge may wish to issue from time to time. From the moment the Project Manager so appointed takes charge of the work, such notices and communications shall operate as if the Successful Bidder himself had received them and all act done by Project Manager shall be "quit facit per alium perse", which means "he who does through another does by himself". The act of Project Manager is the act of the Successful Bidder, as binding as if done by the Successful Bidder himself, notwithstanding absence of formal authority or definite instructions from the Successful Bidder to the said Project Manager or any purported restrictions or powers or limitations of authority imposed by the Successful Bidder. It shall be open to the company to enforce replacement of the Project Manager and/or any other employees of the Successful Bidder in the event that the Engineer-in-charge/ Mine Manager deems the Project Manager or any other employee to be incompetent or otherwise unacceptable at any time. The Project Manager shall arrange for receipt of material, supplies and equipment as per terms and conditions of the Contract.
 - e) The Successful Bidder is expected to employ only Indian Nationals. In case foreign expert(s) is/are required to be engaged, it should be specifically mentioned in the offer, but no foreign exchange will be payable by the company, wherever practicable, skilled/semi-skilled (if available) and unskilled personals are to be recruited locally for underground and surface work.

5. Fire Prevention

The Contractor shall take all reasonable precautions to prevent break out of fire of any nature in the place or in the vicinity of the Mining Facilities. The Contractor shall be responsible for all damages due to fire directly or indirectly attributable to its activities or of its workers/employees. The Contractor shall have to provide a suitable, reliable and adequate fire fighting system by way of water pipeline with fire fighting hydrant points at various strategic locations in the Mining Facilities. In addition to this, fire extinguishers of different types such as CO₂ type, foam type, dry chemical powder type and soda-acid type, suitable for industrial use shall be provided at different required locations. Fire hydrants and fire fighting facilities shall also be provided at vulnerable points like workshops, fuelling facilities, mine offices etc. within the Work Site. The Contractor shall prepare a plan for this purpose, obtain the approval of HCL and shall implement the plan, after such modifications/ additions as HCL may prescribe. The fire fighting plan should comply with all Applicable Laws and the Contractor shall obtain necessary approvals from the statutory authorities.

6. Sanitary and Medical Requirements

The Contractor shall promptly and fully comply with the Applicable Laws and provide sanitary and medical requirements, or as may be prescribed by HCL or by Engineer-in-Charge for proper work, safety and health of the workers/employees and of the local communities. In case of such non-compliance of the Contractor, the same may be provided by the Engineer-in-charge at the Contractor's cost.

7. Cleanliness

All portions of the work shall be maintained and kept neat, clean and proper sanitary conditions shall be maintained at all time.

8. First Aid

The Contractor shall keep first aid facilities and provisions as required under Applicable Laws at the work site.

9. Protection of Work

The Contractor and its workmen shall protect the work, excavations, equipment existing installation and material belonging to the Contractor and HCL from damage until the issuance of Completion Certificate to the satisfaction of the Engineer-in-Charge. Should any damage occur, due to negligence of the Contractor he shall repair it at his own cost, to the satisfaction of the Engineer-in-Charge.

10. Drinking Water

The Contractor shall make necessary arrangements for sufficient supply of cool and wholesome drinking water as per the provisions of Applicable Law.

11. Conservancy

The Contractor shall make necessary arrangements urinals and latrines at the Work Site in accordance with the Mines Act and rules thereto.

12. Work Hours

The Contractor shall comply with the requirements of the work hours and wages as prescribed by the Mines Act and rules thereto. Shift timings of Khetri Mine need to be followed. The persons of Successful Bidder shall be abide by the rules of 'Time Office' of the Khetri Mine registering 'in' and 'out' attendances as per the statute.

Stope blasting is carried out at the end of first shift i.e. at 4.00 PM. During this time no person is allowed to remain in underground.

SCHEDULE - IV

SUPPLIES FROM HCL

HCL shall provide following material, equipment, article etc. to the Successful Bidder to perform the work awarded under this contract.

1. **Explosive and detonators**: Explosive and detonators required for blasting will be made available by HCL on chargeable basis which will be cost price plus five per cent. If required special or specified brand of explosive, HCL will procure / may allow the same to procure through HCL magazine. If procured by successful bidder, five percent will be charged for storage and administrative charges. Explosive and detonator shall be issued at magazine of the mine. It will be the responsibility of Successful Bidder to transport the explosive from the lease boundary to blasting sites and return used explosives to Hindustan Copper Limited (HCL) under the supervision of HCL statutory person. Reserve station facility at each main level shall be prepared and maintained by the Successful Bidder. Recovery towards cost of explosives and detonators will be made from the RA bills.

The Contractor will submit annual requirement of the explosives and detonators to Engineer-in-Charge at the beginning of the year. First such requirement will be given at the time of execution of this Contract Agreement.

Explosive Magazines: HCL will provide the explosive required to execute the job from current magazine to the Successful Bidder as per Statute. However the transportation of explosive from explosive magazine lease boundary will be responsibility of Hindustan Copper Limited.

- 2. **Power:** HCL shall provide power connection to the Contractor at the project site. Power Supply on surface as well as for usage underground shall be provided by HCL on the following terms:
 - a) For underground. The electricity will be supplied from HCL's underground sub-station at 415 Volt +/- 10 %. 50 Hz +/- 5% close to the present working places of the Contractor.
 - b) Power for any surface installation, office, buildings, workshop for any use shall be provided to the incoming circuit breaker of the Contractor.

The contractor at his own cost will also provide suitable electric meters, fuses, switches etc. which should be in the custody and control of HCL. The recovery rate for power supply shall be as per prevailing rate of Khetri Copper Complex. HCL shall not however guarantee for the supply of power and no compensation for any failure or shortage of supply of power will be entertained and this also does not relieve the Contractor of his responsibility for timely completion of this work.

HCL shall charge the contractor at a rate of cost plus five percent basis for the provision of power to the Contractor in accordance with the Clause.

Electricity Rate: *Rs.* 7.80 per kWh, Electricity Duty: Rs.0.40 per kWh, Water Cess: Rs.0.10 per kWh and Component of Fixed Charge: (the range generally appears to be in the range of Rs. 0.40-0.49 per KWH). *Electricity billing will be as per actual during the tenure of the Contract*.

.3. Water: Water will be supplied free of cost at the places, nearest to where the contractor is executing the works underground as per availability and Contractor will have to make own

arrangements for supply of water for execution of works. All pumping installations, pipe network and distribution system will have to be carried out by the Contractor at his own cost.

HCL shall provide adequate water for operation. Water recycling has to be done by the Contractor at his own cost to conserve water by using best efforts and HCL shall render reasonable assistance to the contractor in this exercise. All further water arrangement will be done by the Contractor at his cost and expense. Drinking water will be supplied at one fixed point close to the water line used for mining. From there, the contractor has to extend for his own use.

Any further extension of the water connection by the contractor to execute the Works shall be done at the Contractor's sole cost and expense.

- **4. Compressed Air**: Compressed air shall be supplied by HCL from the nearest source in the mine close to underground locations. Further transmission will be the responsibility of the contractor. The contractor has to indicate the total quantity of compressed air required in cfm at the beginning of the work for making arrangements.
- 5. Land for Contractor's Field Office, Godowns, Workshop: HCL will at own discretion and convenience and for the duration of the execution of the Work, make available near the Project Site, land free of charges to the Contractor for construction of temporary structures for Contractor's Field Office, Godowns, Workshop and assembly yard required for the execution of the contract on an "as-is basis" at no cost to HCL. In case of any modifications, upgrades etc. that need to be carried out by the contractor at his own cost.
- **6. Residential accommodation**: The following residential accommodation in the HCL Colony can be given to the Contractor on chargeable basis.

Type of Accommodation	Numbers	Monthly Rent (Rs.)
Type B	1	212
Type C	5	147
Type D	15	110
Type E	25	81

In addition to monthly rent, the contractor has to:

- I. Deposit a refundable, interest free security deposit amounting to Rs 1 lakh.
- II. Pay electricity charges on actual.
- III. Pay water charges@ Rs. 50/month/house.
- 8. **Diesel**: HCL can supply diesel for construction machinery on chargeable basis which will be prevailing rate plus 5%. Prevailing rate as on 07.10.17 is Rs. 54.85 per liter of ordinary HSD.

SCHEDULE - V

Schedule of items and Rates
As given in Appendix X

SCHEDULE - VI

ESCALATION

Awarded rate for all items mentioned in Price Bid shall remain firm during the entire contract period. However, suitable compensation will be provided for variation in rate of the following items to be calculated in manner given in formula below:

1. Price adjustment for the items other than supply items (Coefficient 0.6):

Labour Escalation = $VWD^*(L_2-L_1)^*'0.30$ L_1

Where:

VWD= Value of the work done in the quarter under review excluding the amount for supplies and design & engineering.

 L_1 = Minimum wages of unskilled labour in non-coal mines (below ground) for schedule employment as per Central or State Govt., whichever is higher as on the last date of submission of tender.

 L_2 = Minimum wages of unskilled labour in non-coal mines (below ground) for schedule employment as per Central or State Govt., whichever is higher on the first day of the quarter under review.

Material Escalation = $\underline{VWD}*(\underline{M_2}-\underline{M_1})*0.20$

 $\mathbf{M_1}$

VWD= Value of the work done in the quarter under review excluding the amount for supplies and design & engineering.

 M_1 = All India Wholesale Price Index (New Series) (Base 2011-12 =100) of all commodities as on the month of Tender submission.

 M_2 = All India Wholesale Price Index (New Series) (Base 2011-12 =100) of all commodities as on the quarter under review.

Fuel and Power Escalation = $VWD*(F_2-F_1)*'0.10$

 \mathbf{F}_1

Where:

VWD= Value of the work done in the quarter under review excluding the amount for supplies and design & engineering.

 F_1 = Average Index number for Wholesale Price for group fuel and power as published by Economic Advisor, Ministry of Industry Government of India (New Series) (Base 2011-12 =100) as on the month of Tender submission.

 F_2 = Average Index number for Wholesale Price for group fuel and power (copy enclosed) as published by Economic Advisor, Ministry of Industry Government of India (New Series) (Base 2011-12 =100) as on the quarter under review.

Revised rate for the quarter under review = Awarded rate + changes due to Labour escalation (i) + changes due to change in All India Wholesale Price Index of all commodities (ii) + changes due to change in Fuel and Power escalation (iii).

2. Price adjustment for the supply items (Coefficient 0.6):

Escalation =
$$\frac{VSM^* (M_2-M_1) *0.60}{M_1}$$

Where:

M₁= Average Index number for Wholesale Price for group Manufacture of Machinery and Equipment as published by Economic Advisor, Ministry of Industry Government of India (New Series) (Base 2011-12 =100) as on the month of Tender submission.

M₂= Average Index number for Wholesale Price for group Manufacture of Machinery and Equipment as published by Economic Advisor, Ministry of Industry Government of India (New Series) (Base 2011-12 =100) as on the quarter under review.

VSM= Value of the supplies made in the quarter under review

Revised rate for the quarter under review = Awarded rate + changes due to escalation.

Note:

The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done and supplies made during the previous three months.

The first such payment shall be made at the end of three months (excluding the month in which the tender was accepted) and thereafter at three monthly intervals. The supplies will be made as the agreed delivery schedule. In case supply is not made as per the delivery schedule, escalation will be calculated and paid up to the actual date of supply or scheduled date of supply whichever is earlier.

If the contract is to be extended beyond the stipulated period for completion of the work due to fault on part of the contractor, escalation on prices/wages will not be allowed. In such case, the rate with escalation as applicable prior to commencement of the extended period shall be paid to the contractor during the extended period of the contract. However, if the delay in the completion of work by the contractor is due to HCL"s fault, escalation on prices/wages will be allowed during the extended period.

Price of design and engineering shall not be considered for escalation.

SCHEDULE VII

SPECIFICATIONS

The following specifications are required to be interpreted in tandem with the awarded work, as applicable.

1. DRAWINGS AND SPECIFICATIONS

- 1.1 Adequate care must be taken in preparing drawings and specifications, however any discrepancy between the specifications and the drawings or any error, omission or ambiguity in the specifications or the drawings, shall not invalidate the Contract. The Contractor shall check all drawings furnished to him after approval by Engineer-in-charge immediately upon their receipt and shall promptly notify to the Engineer-in-charge of any omission or discrepancies or misdescription in the drawings and obtain the instructions of the Engineer-in-charge. Any work carried out by the Contractor after discovery by him of such discrepancy, error, omission, or ambiguity without permission by the Engineer-in-charge will be entirely at the Contractor's risk.
- 1.2 Work(s) shown upon the Drawings but not mentioned in the specifications or described in the Scope of Work without being shown on the Drawings shall nevertheless be held to be included in the same manner as if they had been specifically shown upon the drawings and described in the specifications.
- 1.3 Any Work for which no specifications or Drawings have been prescribed or issued by HCL including execution of all details which shall also cover incidental works whether temporary or permanent, which must evidently be required by reasons of the nature of the works included in the contract and are to be carried out by the Contractor in all respects in accordance with the instruction of the Engineer-in-charge.
- 1.4 Drawings and prints or articles, machinery or fabricated materials of work entering into forming part of the permanent construction, which are not provided by HCL and which are required to be furnished by the Contractor, shall be submitted by the Contractor to the Engineer-in-charge for approval. Such approval shall not, however waive or modify any other provision(s) of the Contract.
- 1.5 The entire responsibility of executing the work in an efficient manner and in conformity with HCL's approved drawings and specifications with all modifications shall be that of the Contractor, except to the extent and for the purposes for which liability may have been assumed expressly under the said documents by HCL.
- 1.6 The approved drawings for the Work as and when provided will show conditions as they are believed by HCL to exist based upon the interpretation of field observations. It is not intended and should not be inferred that the conditions as shown therein constitute a representation by HCL or its representatives that such conditions actually exist, neither shall the Contractor be

- relieved of liability under the Contract nor HCL or any of its representatives shall be liable for any loss sustained by the Contractor as a result of any variation between conditions as shown on the drawings and actual conditions revealed during the progress of the work.
- 1.7 Job besides all other prints used in actual execution by the Contractor. This set shall be designated "Record Prints". A complete and exact record of any and all differences between the Work as actually executed, constructed, erected and the design indicated on the drawings shall be recorded on the "Record Print". Changes made from the design, drawings shall be got approved from the Engineer-in-charge before any alteration work is started. All "Record Prints" shall become the property of HCL.
- **1.8 Revision of the Drawings:** Revision of the drawings will be made as and when deemed necessary by the Engineer-in-charge during the progress of the Work. Additional detailed drawings will be supplied by the Contractor as and when required. These additional/revised drawings shall be considered as forming part of the Contract.
- 1.9 Drawings to be furnished by the Contractor: All drawings/specifications are to be furnished by the Contractor; the same shall be furnished within the specified time. Where approval of drawings before manufacture/construction/fabrication has been specified, it shall be Contractor/s responsibility to have these drawings prepared as per the direction of Engineer-in-charge and got approved before proceeding with manufacture/construction/fabrication as the case may be. Any changes that may have become necessary in these drawings during the execution of the work shall have to be carried out by the Contractor to the satisfaction of the Engineer-in-charge at no extra cost. Drawing shall be submitted as per the requirement of the project. All final drawings shall bear the certification stamp duly signed by both the Contractor and the Engineer-in-charge.

2. CONTRACTOR TO MAKE HIS OWN ARRANGEMENT FOR SUPPLIES

2.1 HCL shall not be responsible or liable in any way for the supply of the equipment, articles, materials or stores of any description, excepting those for which express provision has been made.

2.2 Issue of Material:

- (a) The material as per **Schedule V** shall be supplied to the Contractor at the specified cost by the owner from the magazine. It shall be the responsibility of the Contractor to take delivery of the material from Magazine at Mine and arrange for its loading, transportation and unloading at the site of work at his own cost. The material shall be issued between the working hours only as per rules of HCL as framed from time to time
- (b) The Contractor shall bear all incidental charge for the storage and safe custody of material at site after these have been issued to the Contractor.
- (c) Material specified as to be issued by HCL shall be issued in standard as obtained from the manufactures.

- (d) The Contractor shall construct suitable godowns at the site of work for safe storage of the material its own materials and the materials issued by the Contractor and protect against rain, dampness, fire, theft etc. The Contractor shall also employ necessary watch and ward establishment for the purpose. HCL's Security shall not be in any way responsible for loss of or theft of material from Contractor's custody.
- (e) It shall be duty of the Contractor to inspect the material supplied to it at the time of taking delivery and satisfy itself that the material are in good condition. After the material have been delivered by HCL, it shall be the responsibility of the Contractor to keep them in good condition and if the material are damaged or lost, at any time, these shall be repaired and/or replaced by the Contractor at its own cost according to the directions of the Engineer-in-Charge. HCL shall not be liable for delay in supply or non-supply of any material, which HCL has undertaken to supply, if such delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond to control of HCL. In no case, the Contractor shall be entitled to claim any compensation for loss suffered by the Contractor on this account.
- (f) None of the material supplied to the Contractor will be utilized by the Contractor for manufacturing an item which can be obtained from manufacturer in finished form except in case of emergency and with prior authorization from Engineer-in-Charge.
- (g) The Contractor shall, if desired by the Engineer-in-Charge execute an indemnity bond in the prescribed form, for safe custody and accounting of all material issued by HCL.
- (h) The Contractor shall furnish to the Engineer-in-Charge sufficiently in advance a statement showing requirement of the quantities of the material to be supplied by HCL and the time when the same will be required by the Contractor for the Work, so as to enable to the Engineer-in-Charge to make necessary arrangement for procurement and supply of material.
- (i) Material/equipment supplied by HCL shall not be utilized for any other purposes than issued for.
- (j) The Contractor will have no claim for compensation on account of any such material so supplied to him as aforesaid being unused by him or for any wastage of or damage to any such material.
- (k) All items brought inside the Mine Gate must be supported by delivery challan/gate pass duly endorsed and entered at Security gate.
- (l) All material issued by HCL to the Contractor shall be preserved against deterioration and corrosion by proper storage while under Contractor's custody.

Any damages/losses suffered, on account of non-compliance with the requirements stipulated herein shall be considered as losses suffered due to willful negligence on the part of the Contractor and he shall be liable to compensate HCL.

- (m) All machined surfaces shall be properly greased and should be maintained and protected from damages.
- (n) Openings of equipment, machinery, valves, etc. shall be kept blocked/covered with blinds to prevent entry of foreign matter.
- (o) As far as possible material shall be transported to the site of erection only just prior to their actual erection and shall not be left lying around indefinitely. Instructions of the Engineer-in-Charge shall be followed strictly in this regard.
- Notwithstanding anything contained to the contrary in any or all the clauses of this (p) contract where any material for the execution of the contract are procured with the assistance of HCL either by issue from HCL's stock or purchases made under orders, or permits or licences issued by Government, the Contractor shall hold the said material as trustee for HCL and use such material economically and solely for the purpose of the contract and not dispose them off without the permission of HCL and return, if required by the Engineer-in-Charge, all surplus or unserviceable material that may be left with the Contractor after the completion of the Contract or at its termination for any reason whatsoever on the Contractor being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the material. The price allowed to the Contractor, however, shall not exceed the amount charged to the Contractor. The decision of the Engineer-in-Charge shall be final and conclusive in such matters. In the event of breach of the aforesaid condition, the Contractor shall, in terms of the licences, or permits and/or for breach to trust, be liable to compensate HCL at double the rate or any higher rate or if not being available in the market, then any other rate to be determined by the Engineer-in-Charge and his decision shall be final and conclusive.

3. HIRE OF HCL'S PLANT AND EQUIPMENT

- **3.1** The Contractor has to arrange its own plants and equipments for execution of the Work. The operation and maintenance of the same shall be the responsibility of the Contractor.
- 3.2 The Contractor shall take all care of all tools, tackles, equipment, plants, material or other property belonging to HCL and provided to it for the purposes of the work and shall be responsible for all damages or losses cause by the Contractor, its Project Manager or its workmen. The Contractor shall be solely accountable for tools, plants, and materials provided to the Contractor by HCL and shall handover the same back to HCL in good order.

3.3 HCL shall recover the value of losses or damages to any of the equipment provided to the Contractor as it may deem fit.

4. CONTRACTOR'S PLANT, EQUIPMENT, EMPLOYEES AND METHOD OF WORK

- 4.1 HCL shall not be responsible or liable in any way for the supply of equipment, articles, materials or stores of any description excepting those in respect of which responsibility is specifically assumed. The Contractor shall made its own arrangements at the Contractor's own cost, for personnel, equipment, material handling, further transport, construction tools and appliances and implements, scaffolding and temporary work, work shop facilities, watch and ward, lighting facilities, procurement of all permits and licence necessary for the execution of the Work, and all other facilities of every description which (under the contract are to be provided) are necessary for the satisfactory performance of the Contract, and that the rates quoted by the Contractor and accepted by HCL shall consist full compensation to the Contractor there of.
- 4.2 The Contractor shall also provide without charge the requisite number of persons with the means and material necessary for the purposes of setting out work and for counting, weighing, and assisting in the measurement and/or for inspection at any time during the execution of the work, failing which the same may be provided by the Engineer-in-Charge at the cost of the Contractor and the same may be deducted for any money due to the Contractor under the Contract, or from the Contractor's Security Deposit or from the proceeds of sale of the same, or a sufficient portion thereof.
- 4.3 The Contractor shall also provide all necessary provisions under the Applicable Laws and relevant Rules and Regulations, and is liable to pay for damages arising due to non-compliance and shall be bound to bear the cost of defence of every suit action or other legal proceedings that may be brought by any person for injury sustained due to non-compliance of the above provisions, and to pay damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the Contractor be paid in connection with any compromise or claim by such person.

The plant and equipment provided by the Contractor and its methods and organization for executing the Work shall be in conformity with the provision of Applicable Laws including Mines Act 1952, Mines Rules 1955 and Metalliferous Mines Regulations 1961 and any instructions specifically given by Statutory Govt. authorities HCL and/or Engineer-in-Charge and shall be so carried out by taking all precautions for safety reasons. The Contractor shall give full information in advance as to its plans for carrying out each part of the Work to the Engineer-in-Charge. At any time before the commencement or during the progress of work, if it appears to HCL that the organization of the Contractor is insufficient/inadequate to deliver the progress/quality of Work, as required; HCL may order the Contractor to change or improve its plant, equipment, facilities methods or organization and the Contractor shall promptly comply with such orders but compliance with such orders shall not relieve the Contractor of its obligations to secure the degree of safety, the quality of work and the rate of progress required

under the contract. The Contractor alone shall be responsible for the safety and adequacy of its plant, equipment and method.

5. SUPERVISION OF WORK BY CONTRACTOR & CONTRACTOR'S AGENT AND CONTRACTOR'S SUPERVISING STAFF AT THE WORK SITE

- 5.1 The Contractor shall have the sole and exclusive responsibility for supervision of the Work and all workmen engaged therein. It shall also be obligatory on the part of the Contractor to keep statutorily qualified personnel including 1st Class Mines Manager (Unrestricted), 2nd Class Mines Manager (Unrestricted), Mining Foremen, Mining Mates, Blasters, & other statutory persons as required by the DGMS and other government authorities all the time when work is in progress as required under the various statutes presently in force.
- 5.2 The Contractor shall also provide to the satisfaction of Engineer-in-Charge sufficient and qualified staff for supervision and execution of the Work. Whenever in the opinion of the Engineer-in-Charge, additional statutorily qualified supervisory staff is considered necessary, they shall be employed by the Contractor without additional charges on account thereof. The Contractor shall ensure to the satisfaction of the Engineer-in-Charge that efficient supervision by competent persons shall be provided if the work is being executed by sub-Contractor.
- 5.3 The Contractor shall keep at all time on the Work Site while the Work is in progress, a properly qualified and competent Project Manager, duly authorized and empowered to act for the Contractor and to receive on the Contractor's behalf all such notices and communications as HCL and/or the Engineer-in-Charge may wish to issue from time to time. From the moment the Project Manager so appointed takes charge of the Work, such notices and communications shall operate as if the Contractor himself had received them and all act done by Project Manager shall be "quit facit per alium perse", which means "he who does through an other does by himself. The Act of Project Manager is the act of the Contractor, as binding as if done by the Contractor itself, notwithstanding absence of formal authority or definite instructions from the Contractor to the Project Manager or any purported restrictions on powers or limitations of authority imposed by the Contractor. It shall be open to HCL to enforce replacement of the Project Manager and/or any other employees of the Contractor in the event that the Engineer-in-Charge deems the Project Manager of any other employee to be incompetent, or otherwise unacceptable at any time.
- **5.4** HCL's shift-in-charge of mine in the shift should be contacted for any emergency/exigency for work during a shift.
- 5.5 The Contractor is expected to employ only Indian Nationals. In case foreign expert(s) is/are required to be engaged, it should be specifically mentioned in the applicable Plans submitted for approval, but no foreign exchange will be payable by HCL. Wherever practicable, skilled/semiskilled (if available) and unskilled personnel are to be recruited locally for underground and surface work.

6. EXCAVATIONS

6.1 Extent of Excavations

All the rocks within the neat line shall be excavated and no rock projections shall fall within the limits of the neat line. No payment will be made for rock excavated beyond the limits of the neat line in good ground conditions. In good ground, the neat line of excavation will be as indicated in the Drawings, except in those instances where the specifications/Drawings call for an increased excavation to accommodate concrete lining. The Contractor will be paid for excavation with in the neat line at the rates mentioned in Schedule of Work.

- (a) In any excavation, over break up to 5% by volume in good ground may be allowed without any payment or. Over break beyond this limit will be made good by the Contractor at its own cost and in the manner approved by the Engineer-in-Charge without any extension of time. In excavations for shaft sinking, winzing, drive, cross cuts, ramp including stripping in shaft, or winze, over break will be estimated at an interval of every one meter and in excavation in raise and raise stripping the over break will be estimated for sections at an interval of every two mtrs. along the axis of the excavation. In all the cases payments shall be made as per quantity given in drawing for individual item or the actually executed whichever is lower.
- (b) No under excavation of any nature will be permitted at any section of the excavation.

6.2 Bad ground condition

- (a) Wherever rock strata encountered is of the friable nature, loose fissure, open fault, highly faulted, fractured such that by normal blasting it shatters and breaks the rock beyond neat line of excavation rendering increase of muck handling, support and associated work, it should be referred to Engineer-in-charge who shall take decision of whether the strata qualifies to be termed as "bad ground".
- (b) For determining the ground condition of the rock following criteria will be considered: -
 - (i) Rock quality designation (R.Q.D.);
 - (ii) requirement of temporary support.
- (c) In case of bad ground certified by Engineer-in-Charge based on above criteria, and in case of over break beyond five percent (5%) by volume, payment for over break excavation and concrete lining will be made at the rate of forty percent (40%) and seventy five percent (75%) respectively of the rates for the items.
- (d) Wherever bad ground is encountered and it is certified by Engineer-in-charge, the Contractor shall take such precautions and follow such methods as decided by engineer in-charge so as to have minimum over break.

(e) Excavations for man holes, as per MMR 1961 shall be done using special blasting techniques without any extra charge.

6.3 Blasting Damage

The Contractor will be held responsible for any damage due to blasting and all blasts must be done in a manner such that it will cause least damage to excavation walls and prevent shattering of excavated areas, installations, buildings, foundations, equipments, structures etc.

6.4 Special blasting technique

The Contractor may be asked to undertake "special blasting technique" at places where the nature of rock of work so demands. The special blasting technique shall include controlled blasting by way of pre-splitting, contour blasting, chipping of rocks or any such other techniques as may be proposed or adopted by the Contractor using proper tools.

6.5 Wherever the Job is of the nature requiring the presence of /approval of/ written permission from any of the statutory body, covered under any Applicable Laws, it shall be obtained by HCL.

The Bidders shall incorporate in their tenders a technical write up illustrating the technology proposed to be adopted in the execution of the work. The technology for shaft sinking and relevant parameters shall also be detailed out in a sequential manner as given below:

- i) Means of breaking the ground.
- ii) Method of mucking and muck disposal.
- iii) Means of supporting the shaft sides, insets and interim support of the same, whenever required.
- iv) Ventilation system.

7. FABRICATION, ASSEMBLY, ERECTION AND COMMISSIONING

- **7.1** Fabrication of the structure wherever required shall be made only as per the Drawings supplied by the Contractor duly approved by Engineer-in-Charge.
- **7.2** Any component or part received separately from the main body of the equipment shall be assembled to the equipment as per the drawings, specifications of the manufacturers and as per the instruction of the Engineer-in-charge.
- **7.3** The Contractor's responsibility shall consist of lifting of the equipment to the proper level by means of the Contractor's own erection tools.
- **7.4** Before putting the equipment on foundation it shall be the responsibility of the Contractor to check the orientation of foundation, placing of anchor bolts and diameter of holes in the

- support/saddles etc. If any minor adjustments are required, the same shall be done by the Contractor after obtaining the prior approval of the Engineer-in-Charge.
- 7.5 The Contractor shall be entirely responsible for the perfect alignment and adjustment of machinery and equipment, installed by the Contractor or supplied by HCL and installed by the Contractor.
- **7.6** After the placement of equipment, it shall be properly fixed on to the structure or grouted on the foundation.
- 7.7 Grouting of holes with foundation bolts shall be carried out after placing of equipment on foundation. Grouting below base plate shall be done after finally checking of level and alignment and with the approval of Engineer in-charge. Before final grouting machinery/equipment shall be levelled on the steel shims. The foundation bolts shall be fully tightened keeping proper grouting gap as per normal practice and/or specified by the manufacturers.
- 7.8 Commissioning: Wherever installation/ assembly of equipment/ machinery/ items is ordered by HCL and carried out by the Contractor in the manner specified, it shall be tested/ commissioned as directed/ approved by the Engineer in-charge. Unless otherwise express provision made in the Contract, Contractor shall arrange all necessary tools, tackles, equipment required for the commissioning of the plant.

8. FENCING AND BARRICADES

- **8.1** The Contractor shall at its own cost erect and maintain fencing and barricades required in connection with execution of Work to guard or protect:
 - a) excavations, scaffolds and platforms
 - b) hoisting area,
 - c) areas adjudged hazardous by Mining mate/ foreman engineer in-charge/ Asstt. Manager/ Manager.
 - d) Owner's existing property likely to be damaged by Contractor's operation,
 - e) Unloading spots, and
 - f) Any other place as directed by the Engineer-in-Charge.

9. OPERATION AND MAINTENANCE OF EQUIPMENT

9.1 The Contractor shall be responsible for operation, maintenance and repairs of all equipment, tools and tackles used by the Contractor whether belonging to HCL or the Contractor's own except where express responsibility is undertaken by HCL. The operators/drivers of the equipment, wherever required, shall be as per the statutory requirements.

10. SUPPORT

10.1 Loose Rock

10.2 Slabs which cannot be scaled down will be secured by rock bolts or in any other manner as directed by the Engineer-in-Charge.

10.3 Temporary Support:

- (a) Wherever necessary, temporary ground support shall be provided/erected and maintained so as to keep the area in safe condition till the permanent support is provided/erected.
- (b) If in the opinion of the Engineer-in-Charge any other type of support is necessary, the Contractor shall comply with the instructions.
- (c) The Contractor shall be paid for supports at the rates provided in Schedule of rates, if rates are not provided in Schedule then at mutually agreed rates.

11. CONCRETE

- **11.1** This section of the specifications supplements the drawings pertaining to mixing, testing and placing of reinforced cement concrete.
- 11.2 Concrete placement shall always conform to the following conditions: -
 - (a) Concrete shall not be poured until all surfaces with which it will come into contact are scaled, washed and free from dirt, loose rock, oil, hardened mortar or other objectionable coating or debris etc. Immediately prior to pouring, the Contractor shall examine space behind formwork and shall remove any loose wall rock.
 - (b) In saturated formations, the Contractor shall install weep pipes to prevent mixing of water with freshly poured concrete. Engineer-in-Charge may require the grouting of these weep holes after the concrete has set. Quick setting cement shall be used as and when required.
 - (c) In saturated formation where a build-up of hydrostatic pressure is probable, the Engineer-in-Charge may order the installation of additional reinforcement or thicker lining or both. Alternatively the Engineer-in-Charge may specify the installation of weep holes pipes for pressure relief. Discharge of weep holes will be collected in water garland or diverted to main channel (drain) of the mine. Payment for such additional work will be paid to contractor as per respective item rates if exists or as per analyzed rate.
 - (d) The Contractor shall maintain a record of all pours showing dates, quantities, locations, weather and temperature conditions, a tabulation of the code numbers of all test cylinders cast and the result of all slump tests. A copy of these records will be made available to the Engineer-in-Charge by the Contractor as and when required.
 - (e) The Contractor will notify Engineer-in-Charge at least 24 hours in advance of all pours so that Engineer-in-Charge shall arrange the measurement of actual

- excavated area and consequently the actual concreting done and a HCL's representative could be present for inspection prior to and during the pour.
- (f) Concrete shall be properly vibrated until maximum density is attained. Lined surfaces must present a smooth homogeneous surface when forms are removed.
- 11.3 No additives of any kind shall be used without the written approval of the Engineer-in-Charge. Reinforcement shall be free from dirt, paint, grease, oil, flaking, rust and other destroyers of bond.

11.4 Formwork

- (a) All formwork used shall be furnished by the Contractor and must be approved by the Engineer-in-Charge prior to their use. Design and construction of the formwork must be such that the true shape and alignment is maintained throughout. The lining emplaced shall be free from bulges, surface honeycombs and other defects. The mortar leakage should be minimum. Formwork shall be maintained free from dents, twists and bends and should be sufficiently strong, so that true dimensions of the work is obtained. Wherever reinforcement steel is to be used, it shall be secured in a manner preventing displacement during concreting.
- (b) Concreting rates shall be inclusive of providing all material, transporting to site, mixing, pouring, placing, shuttering work required, bending, tying and placing reinforcement steel and related works.
- (c) The concreting rates shall also include cost of work required for obtaining smooth finished surface which may require chipping, plastering etc.

11.5 ISS/BIS Specifications:

- (a) All reinforced and plain concrete shall conform to IS 456-1978.
- (b) Concrete shall be lined as per IS 516-1959.
- (c) Portland cement shall conform to IS 269-1976.
- (d) Fine and coarse aggregates shall conform to IS 383-1970.
- (e) All reinforcement shall conform to IS 432-1982 or IS 1139-1966.
- (f) Formwork and stripping time shall conform to IS 456-1978.

12. LINES AND GRADES

- 12.1 It may be necessary at times to discontinue portions of the Contractor's work in order that the Engineer-in-Charge/Surveyor may make routine measurements or surveys in the interest of better accuracy of the results. On request of the Engineer-in-Charge/Surveyor the Contractor shall discontinue the Contractor's work to such an extent as may be necessary for this purpose.
- 12.2 No payment shall be made for the cost, the Contractor bears for any work or for delay occasioned by the Engineer-in-Charge/Surveyor's establishing or checking lines or grades or making other

- measurements or by the Engineer-in-Charge's inspections. No extension of time will be allowed for such delays.
- 12.3 The Contractor shall furnish all field engineering including alignment, gradients, dimension, etc. for the Contractor's work to the Engineer-in-Charge/Surveyor whenever asked for. All lines and gradients shall be subjected to checking and approval by the Engineer-in-Charge. Such checking shall not, however, relieve the Contractor of his responsibility for accuracy of engineering work.
- **12.4** Contractor shall protect and preserve all survey stations till end of the work unless the Engineer-in-Charge directs their earlier removal.

13. SYSTEM OF MEASUREMENT

- **13.1** Measurement shall be taken along the defined centre line of the excavation.
- 13.2 On the first working day of every calendar month, the work completed during the previous month shall be measured by Engineer-in-Charge/Surveyor in the presence of the Contractor's representative. Similar measurement will be done when any part is completed and may become unapproachable, provided the Contractor gives not less than 24 hours notice. These measurements shall be recorded and signed by both the parties and shall be binding on both the parties. If such notice having not been given or consent not being obtained, the same shall be made accessible at the Contractor's cost.
- 13.3 The joint measurement as mentioned above will be for quick payment of advance against the bills. The Engineer-in-Charge/Surveyor will inform the Contractor to do the rectification in respect of shape, size, gradient etc. if any and the next payment of advance against the bills will be withheld till the rectification work, if any, is carried out completely by the Contractor to the satisfaction of Engineer-in-Charge/Surveyor.

14. ALIGNMENT

14.1 It shall be the Contractor's responsibility to excavate all declines, ramps, drives, crosscuts, raises, winzes and other excavations to correct alignment, gradient and dimensions. Survey stations for HCL as shall provide control of lines and gradient and when necessary but day-to-day checking of the alignment and gradient shall be the responsibility of the Contractor.

15. SHAFT SINKING

- 15.1 The HCL shall provide initial survey reference points for sinking. The Contractor shall carry out the work with the specified alignment, grade, center, etc.
- 15.2 As standard sinking procedure number of plumb lines shall he provided by the Contractor and heshall set out these along the periphery of the shaft at required positions. All measurements for excavation and concrete lining shall be with reference to these lines. The excavated shaft will have tolerance of +50 mm with reference to design shaft radius and finished shaft: will have tolerance of +25 mm at any place With reference to design shaft radius, the Contractor shall maintain the shaft strictly vertical.

15.3 The HCL shall make check surveys for verticality of shaft at any time after giving one day prior Notice to the contractor. The contractor shall discontinue his work to such an extent as may be necessary for this purpose. Such discontinuance will not count for delays. These check survey will in no case absolve the Contractor from his obligations as per the terms of the contract and no claim will be acceptable due to this reason.

Any temporary support required for maintaining safe working environment shall be erected and maintained by the Contractor at his own cost.

16. VENTILATION

The Contractor will take special care for ventilation and make necessary arrangements to attain the standard of ventilation at the work place. The standard of ventilation as laid down in the statute shall be strictly followed by the contractor.

17. ROCK BOLTING

The Contractor shall drill holes and install grouted type rock bolts in the grid pattern at the places approved by the Engineer-in charge. The installation of these rock bolts will be accepted only after successful pull test which shall be conducted in the presence of the Engineer-in-charge's representative. For the pull test to be successful, the rock bolt should withstand a minimum pull of 7 tonnes.

18. INSTALLATION OF BELL SIGNAL IN SHAFT

The following conditions should be fulfilled for the installation of shaft signals:

The Cables should be DGMS approved armoured PVC control cable. Suitable number of cores shall be provided in the cable for the ultimate shaft depth of 1200m. The minimum size of cable shall be 1.5 sq. mm.

The bell boxes used in Underground levels should be of M.S. not less than 1.5 mm and IP 45 approved boxes. The bell box should be accompanied with power indication and bell push light indication should be used. The bell signal should be of lockout system bell with banks man panel board and engine room level indicator.

The Underground signal should be received to banks man only and only one level signal communication should be there and other level should be indicated by buzzer signal. The panel board should accompany with standby level bell and engine bell.

There should separate circuit for engine to banks man bell so as it should be independent of other signals.

The cable lowered should be fixed firmly to the joists used therewith by using wooden clamp with MS plates. The glands used should be of mechanical type brass glands.

In each level, junction box should be used for cable connection for further levels and separate bell box should be used. The connection made in the junction box should be clearly marked by ferrules on the leads and proper terminal connections.

Each bell box should consist of fuse controls for each level independently.

Provisions should be made for battery back up.

Voltage for signal should not exceed 30 Volts.

Provision should be made for gate interlocking with winders. Winders should not start, when ground/ inset level gates are opened.

Clear indications should be given to the driver for keps in-out selector of men, materials, stuff, skip change.

19. REINFORCEMENTS

Reinforcing bars for concrete shall be "TMT bars with strength requirement conforming to IS: 1786-1985" of Grade Fe 415 / Fe 500 from SAIL/ TISCO / RINL.

20. FABRICATION OF STEEL STRUCTURES

The Contractor shall be responsible for design and detailing of steel structures & connections. Fabrication drawings shall be prepared based on design drawings of steel structures. Detailing shall be such that erection shall be convenient and free from all interfaces, drilling and cutting at site. The design of connection shall provide adequate strength for transfer of force in the structural elements, as indicated on design drawings.

The details under fabrication includes, but not limited to the following:

Preparation and supply of material indents, bolt lists bought out items list.

Preparation and submission of fabrication drawings, modification /rectification sketches, as made drawings, erection drawings, and bill of materials, bolts lists and shipping documents for approval of the Engineer-in-charge.

Preparation of design calculations for non-standard connections, temporary bracings, etc for approval of HCL.

Procurement and collection of all steel materials from stock-yards/ stores, including loading, transportation, unloading and stacking and storing on skids or supports.

Procurement and collection of all consumables like bolts nuts, washers, electrodes, paints, shims, packs, etc., including allowance for spares and wastage.

Cold straightening of section and plates, whenever they are bent and kinked.

Fabrication of all steel structural components covered under tender drawings, design drawings and generally described under the scope of the project.

Making arrangements for and conducting tests, such as chemical analysis, physical and mechanical tests on raw materials where specified / as directed by the Engineer-in-charge.

Making arrangements for providing all facilities for conducting ultrasonic, X-ray or gamma ray tests of all important but weld joints, getting the tests conducted by reputed testing laboratories making available test films / graphs, reports and interpretation.

Control Assembly of steel structural components at Shop, wherever required.

Preparation of steel structural surfaces for painting as provided in the specifications / drawings.

Application for one primer Coat of painting at Shop, as specified in the design drawing/specifications.

Loading, transportation from fabrication workshop to site of erection and unloading of all steel structural components / unit lies.

21. MATERIALS

21.1 Structural Steel

Unless otherwise specified in the drawing Structural steel and other related materials for construction shall conform to:

All rolled sections and plates (Thickness 20 mm and less) shall conform to Grade A (Fe 410 WA) as per IS: 2062-2006, (SAIL, RINL and TISCO).

Plated structures above 20 mm and subjected to dynamic loading shall conform to Grade-B(Fe 410 WE) as per IS:2062~2Q06. (SAIL, RINL and TISCO).

High strength micro-alloyed steel shall conform to SAIL-MA 350 HYA / HYB (SAIL product).

Steel sheets shall conform to IS: 1079-1994.

Steel tubes for structural purposes shall conform to IS: 1161-1998 (Grade YST-240).

Crane rails shall conform to IS: 3443-1980.

All black hexagonal bolts, nuts and lock nuts shall conform to IS: 1363-2002 and IS: 1364-2002 (for precision and semi- precision hexagonal bolts), Washers shall conform to IS: 2016:1967.

Due to non-availability of specified materials, suitable substitutions may be provided with the consent of the Engineer. Such substitution shall be incorporated in the "As-built" drawings.

All the items are to be cut as per requirements of the drawing. If joints are to be provided in any item in order to meet requirements of size and shape, cutting plan showing locations of joints shall be prepared for consideration of Engineer. Joints provided shall be incorporated in "As built' drawings. Rolling and cutting tolerances shall be as per IS: 1852: 1985.

Only tested materials shall be used unless use of untested materials for certain secondary structural members is permitted by the Engineer-in-charge. If test certificate for the material is not available from the main producer, the following tests shall be carried out at the discretion of the Engineer-in-charge:

- Chemical Composition
- Mechanical Properties
- Weld ability test

Where steel castings are to be used the, same shall conform to IS: 1030: 1998.

21.2 Bolts and Nuts

Black hexagonal bolts, nuts and lock-nuts shall conform to IS: 1363: 2002. Precision and semi-precision hexagonal bolts, screws, nuts and lock-nuts shall conform to IS: 1364:2002.

21.3 Electrodes

Mild steel electrodes and high tensile steel electrodes shall conform to IS: 814:2004. Electrode to be used for submerged welding shall conform to specification IS: 7280: 1974.

21.4 Storing of Materials

Materials shall be stored and stacked properly ensuring that place is properly drained and is free from dirt. It shall be ensured that no damage is caused due to improper stacking.

21.5 Materials preparation

Cut edges shall be finished smooth by grinding or machining wherever necessary. Sufficient allowance (3 mm to 5mm) should be kept in the items in case machining is necessary. Cutting may be effected by gas cutting, shearing, cropping or sawing. In gas cutting of high tensile steel, special care is tob7, taken to leave sufficient metal to be removed by machining so that all metal that has been hardened by flame is removed. Sufficient shrinkage allowance (@ I mm/m) shall be kept wherever heavy welding is involved.

Straightening and bending shall be done in cold condition as far as practicable.

If required, straightening and bending may be done by application of heat between 900°C and 1100 °C. Cooling down of the heated item shall be done slowly.

21.6 Drilling and Punching of holes

Drifting of holes for bolts during assembly shall not cause enlargement of holes beyond permissible limit or damage the metal.

Holes for bolted connection should match well to permit easy entry of bolts. Gross mismatch of holes shall be avoided.

21.7 Assembly for fabrication

Fabrication of all structural steelwork shall be in accordance with IS: 800-2007 and in conformity with various clauses of this specification, unless otherwise specified in the drawings.

Fabrication of structures shall preferably be taken up as per the sequence of erection. All erection shall bear erection mark no. and reference drg no. at a prominent location of the structures for easy identification at site.

Fabricated structures shall conform to tolerance as specified in this standard and in IS: 7215-1974. In case of contradiction, tolerances specified in this standard shall prevail.

All the components of structures shall be free from twist, bend, damage etc.

Assembly of structures shall be carried out by using suitable jigs and fixtures in order to obviate distortion during welding.

Cutting of items specially for truss, bracing, bunker, hopper, galleries surge girder, portal etc, shall be done only after checking of sizes as per Layout.

Surface, wherever machining is specified, shall be either planed or milled or ground to ensure maximum contact.

If end milling or machining is planned after the assembly is over, sufficient allowance (5 mm to 15 mm) shall be kept in the items, where milling/machining is to be done.

If pre bending of the plate is required to avoid welding distortion, it shall be done in cold condition.

If extra joints are required to be provided in column, crane girder etc, approval should be obtained from the Engineer-in-charge. However, as general guidance following is suggested.

Splice joints of column and crime girder shall of full strength butt weld and wherever possible shall be located at zones of minimum or substantially lesser stress.

Splice joints of flange and web should preferably be staggered.

Sufficient trial assembly of fabricated components (despatch, elements) shall be carried out in the fabrication works to control the accuracy of workmanship.

Where necessary, washers shall be tapered or otherwise suitably shaped to give the heads of nuts and bolts satisfactory bearing.

The threaded portion of each bolt shall project through the nut at least by one thread.

Permissible deviations from designed (true) geometrical form of the dispatch elements shall be in accordance with IS: 7215~ 1974.

21.8 Welding

All metal arcs welding shall be carried out as per IS: 9595-1996.

Submerged arc welding of mild steel and low alloy steel shall be as Per IS: 4353-1995.

Electrodes shall be stored in a dry place. Electrodes whose coatings are damaged due to absorption of moisture or due any other reason shall not be used.

Low Hydrogen electrodes and flux for submerged welding shall be dried at 250 -3000 C for one hour in drying oven before use.

For suitability of wire flux combination, procedure test shall be carried out as per IS: 3613-1974 if so required.

Welding shall be done by electric arc process. Generally submerged arc, automatic & Semiautomatic welding shall be employed. Only where it is not practicable, manual arc welding may be resorted to. In case of manual arc welding recommendations of electrode manufacturer is to be strictly followed:

Welding surface shall be smooth, uniform, free from fins, tears notches or any other defect which may adversely affect welding.

For multi run weld deposit, the next run should be done only after thorough removal of slag and proper cleaning of surface.

Fillet weld shall have the correct profile with smooth transition into parent metal. Dressing of welds, if specified, shall be done by such method which does not cause grooving and other surface defects on the weld or on the parent metal.

All butt welds shall start and end with run on and run off plates. All such plates shall he carefully trimmed off by gas cutting after welding is over.

Fillet welds shall not be stopped at corners but shall be returned round them.

If butt weld is to be ground flush with the surface of the member as per drawing adequate reinforcement shall be built up and then the same shall be chipped off and ground flush. The grinding is to done in the direction of stress flow till the transverse marks are eliminated.

Welding shall not be done under such weather conditions, which might adversely affect the efficiency of the welding.

Manipulators shall he used wherever necessary and shall be designed to facilitate welding and ensure that all welds are easily accessible to the operators.

Stress relieving after welding shall be done if especially called for in the drawing or specification. Ends of structural members and portions of gussets receiving welding at site shall be left unpainted.

21.9 Inspection & Testing

Engineer-in-charge shall have free access at all times to those parts of Contractor's or his Sub Contractor's works which are concerned with the fabrication of steel works and shall be afforded all reasonable facilities at all stages of preparation, fabrication and trial assemblies for satisfying himself that the fabrication is being undertaken ill accordance with the provisions of relevant specification.

All gauges and templates, tools, apparatus, labour and assistance for checking shall be supplied by the Contractor free of charge. The Engineer-in-charge may at his discretion, check the test results obtained at the Bidder's works, by' independent test at the Government Test House or elsewhere, and should the material so tested be found to be unsatisfactory, the cost of such test shall be borne by the Contractor.

Contractor shall make all necessary arrangements for Stage inspection by the Engineer-in-charge during the fabrication at shop and incorporate all on the spot instructions / changes conveyed in writing to the Contractor.

Material improperly detailed or wrongly fabricated shall be reported to the Engineer-in-charge and shall be made good as directed. Minor misfits which can be remedied by moderate use of drift pins, and moderate amount of reaming and slight chipping may be corrected in that manner, if in the opinion of the Engineer-in-charge the strength or appearance of the structure will not be adversely affected. In the event the Engineer-in-charge directs otherwise, the items will be

rejected and a completely new piece shall be fabricated. The cost of correcting errors shall be to the account of the Contractor.

The Engineer-in-charge/Engineer shall have the power:

- a. To certify, before any structure is submitted for inspection, that the same is not in accordance with the contract, owing to the adoption of any unsatisfactory method of fabrication.
- b. To reject any structure as not being in accordance with specifications and drawings.
- c. To insist that no structure or parts of the structure once rejected is resubmitted for inspection / test, except in cases where Engineer-in-charge authorized representative considers the defects as rectifiable.
- d. If, on rejection, of structure by Engineer-in-charge the Bidder fails to make satisfactory progress, within the stipulated period, Engineer-in-charge: shall, be at liberty, to cancel the contract and fabricate or authorize the fabrication of the structures at any other place he chooses, at the risk and cost of the Bidder without prejudice to any action being taken in addition to terms of General Conditions of Contract.

The Engineer-in-charge's decision regarding rejection shall be final and binding on the Bidder.

The specifications prescribed various tests at specific intervals for ascertaining the quality of the work done. If the tests prove unsatisfactory, company / shall have the liberty to order the Bidder to re-do the work, done in that period and / or to order such alterations and strengthening that may be necessary at the cost of the Bidder and the Bidder shall be bound to carryout such orders failing which the rectification/redoing will be done by the Engineer-in-charge through other agencies and the cost recovered from the Bidder.

Notwithstanding any inspection at the workshop the Engineer-in-charge shall have the liberty to reject, without being liable for compensation any, fabricated members or materials brought to site that do not conform to specifications / drawings.

All rejected materials shall be removed from the site, of fabrication by the Bidder at his own cost and within the time stipulated by Engineer-in-charge.

21.10 Testing of welding:

The Engineer-in-charge may order ultrasonic/radiographic testing of welded structure if necessary. Such test will be limited to 1% of length of weld.

21.11 Rectification of defects in welds

In case of detection of defects in welds, the rectification of the same shall be done as follows:

All craters in the weld and breaks in the weld run shall be thoroughly filled with weld.

Undercuts, beyond acceptable limits, shall be repaired with dressing so as to provide smooth transition of weld to parent metal.

Welds with cracks and also welds with incomplete penetration, porosity, slag inclusion etc. exceeding permissible limits shall be rectified by removing the length of weld, at the location of such defects plus 10 mm from both ends of defective weld, and shall be rewelded. Defective weld shall be removed by chipping hammer, gouging torch or grinding wheel. Care shall be taken not to damage the adjacent material.

22. Site inspection and waste rock handling:

The Bidder shall inspect and acclimatize the transport network of the mine before submission of their quotation.

The Engineer-in-charge shall not take responsibility for causing any delay while evacuation of the generated muck.

Excavation for separate waste disposal facility is available at 180 mRL and 0 mRL but installation of hoist, loading and unloading facilities/chute etc will be done by the contractor at his own cost.

The waste rock hoisted will be trammed by Loco GB combination and dumped in the stopes void between 120 mRL to 180 mRL.

SCHEDULE - VIII

PERFORMA FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT

(ON NON-JUDICIAL STAMP-PAPER OF APPROPRIATE VALUE)

To	,
'Ta	ndustan Copper Limited, amra Bhawan' Ashutosh Chowdhury Avenue, olkata – 700 019 ar Sir,
us for de _l	M/s upon being arded the work of [] at Khetri Copper Mine under tender/LOI/Work Order No approached with the request to furnish Hindustan Copper Limited at Corporate Office, Kolkata a Bank Guarantee Rsonly (Rupees only) towards security posit. At their request and in consideration of the promises we have agreed to give guarantee as hereinafter mentioned.
1.	We hereby agree and undertake that if in your opinion any default is made by the said M/s in performing any of the terms and/or conditions of the agreement or if in your opinion he commits any breach of agreement or there is any demand by you against the said M/s then on notice to us by you we shall on demand
	without demur and without reference the said M/s
2.	proceedings are taken against the said M/s You will have full liberty without reference to us and without affecting this guarantee. Postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the
	contract with the said M/s and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s
3.	Your right to recover the said sum of Rs only (Rupees from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s and/or that any dispute or disputes are pending before any officer, tribunal or court.

4.	Our guarantee herein contained shall not be determined or affected by the liquidation or winding up of dissolution or change or constitution or in solvency of the said M/s
5.	Our liability under this guarantee is restricted to Rsonly (Rupees
6.	We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the power of attorney dated granted to him by the Bank.
Yo	ours faithfully,
	 Bank
	ignature of a person duly authorized to sign on behalf of the Bank).

SCHEDULE - IX

MANDATE FORM FOR ELECTRONIC PAYMENT THROUGH INTERNET & RBI

To																			
Hindustan Copper Lim	ited,																		
			•																
Dear Sir,			•																
Sub: Authorization for Electronic fund transfe							ICL	,									tÌ	hroi	ugh
Refer Work Order No.													da	ated	l				
(Please fill in the inform	nation in C	CAP	ITA	LL	ETT	ERS	S. Pl	ease	TI	CK v	whe	reve	er i	t is	app	lic	able	e)	
1. Name of the Party	:																		
2. Address of the Part	y :																		
	City:			Pin	Cod	le		.											
	E-mail Id:																		
	Permanent	t Ac	cou	nt N	Juml	er:.													
3. Particulars of Bank	:																		
Bank Name							В	ranc	h N	ame	;								
Branch Place							Branch City												
Pin Code								Branch Code											
MICR No																			
(9 Digits code number	appearing (on tl	he N	/IC	R Ba	and o	of th	e Cł	near	ie su	เททโ	ied	bv	the	Baı	nk.			
Please attach Xerox co									_				-						
Branch name and Code	number)																		
Account Type Savings Currer					ent					Cas	sh (Cred	dit						
Account Number (as appearing																			
in the Cheque Book)																			
RTGS/IFSC Code								_											

4. Date from which the mandate should be effective:

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, I shall not hold Hindustan Copper Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through RBI EFT/Internet/RTGS.

Signature of the Party/Authorized Signatory
ed above are correct as per our records.
(Signature of the Authorized Official from the Banks)

N.B.: RTGS / NEFT charges, if any, shall be borne by the party.

VOLUME II

TECHNICAL DESCRIPTION OF IInd PHASE EXPANSION AT KHETRI COPPER MINE

1.1 Khetri Copper Mine

The Khetri Copper Complex has two underground working mines: Khetri Copper Mine & Kolihan Copper Mine. The Khetri Copper Complex falls on the northern tip of well known Khetri Copper Belt (KCB) stretching about 80 km from Singhana in Jhunjhunu District to Raghunathgarh in Sikar District of Rajasthan State. It is situated about 160 km north of State capital Jaipur and 180 km southwest of New Delhi.

The Khetri Copper Mine forms a part of northern extremity of Aravali range of hills. There are three NE-SW striking ranges separated by sandy plains within the lease boundary. Towards west, falls the eastern foot-hill of Makro Hill range. The central hill range contains copper mineralization. This hill range is separated by Kharkhara Valley from Makro Hills. On further eastern—side,—there—is magnetite-quartzite—hill—of—moderate height/elevation separated by the valley where different plants, stores, administrative building etc. are located. The slopes of the hills are very steep with little soil cover. Whereas the southern part of Khetri ML is a hilly terrain, the northern part is soil covered plain area. The highest point of the area is 555 meters above mean sea level and the valley level is around 350 meters above mean sea level.

The area is located in the Survey of India Topo sheet no.44 P/16 on the scale of 1:50000 (1 cm = 1/2 Km). The co-ordinates of the area are as given below-

N 28° 03' 46" E 75° 48' 44" N 28° 05' 50" E 75° 49' 53"

There are two seasonal nallas, namely Kharkhara in the west and Sukhnadi on the eastern side of the KCC. Natural flow of water in the drainage system of this area has a trend towards NE. Khetrinagar Township and Gothra Village are located towards east of the lease boundary and Singhana and Kharkhara villages towards north-east and south-west of the lease boundary respectively.

The Khetri Mine has a mining lease of 395.07 Hectares (Forest land – 164.44 Hectares & Non forest land – 230.73 Hectares) valid up to 31.03.2020, the forest within the leases boundary has also been diverted for mining and its related activities. The Mining Plan for production capacity of 1.50 Million Tonnes / year has also been approved by Controller of Mines, Indian Bureau of Mines, Ajmer Region. The mine has a Environment Clearance (EC) for production capacity of 1.50 Million Tonnes / year from Ministry of Environment, Forest & Climate Change (MOEF&CC), Govt. of India. Consent to Operate for the present production level has also been obtained from Rajasthan State Pollution Control Board (RSPCB), Jaipur.

The general climate of Khetri Nagar can be described as "extreme".

	Maximum Temperature	Minimum Temperature
Summer	48°C	30°C
Winter	18°C	2°C

The diurnal variation in temperature is very high indicating typical desert and arid climate. The rainy season extends normally from July to October.

The Khetri Copper Mine has been divided in two blocks namely

- 01. Khetri Block (1600 to 5000 latitudes)
- 02. Banwas Block (5000 to 6200 Latitudes).

The Mine was developed in the seventies to a depth of about 400m from surface up to 0 m RL (coinciding with mean sea level). Production levels are developed at 60 m interval. The Mine has two main accesses – one service shaft and another production shaft. Ore from different production levels is directed to lowest level i.e. 0 m RL wherefrom it is hoisted the surface through a friction winder after crushing to minus 150 mm size through a jaw crusher.

Current operations reached to 0 m RL. The Mine contains about 43 million tonne ore up to (-) 180 m RL. To mine this ore at an optimum rate, depth extension of the Mine is necessary. It is therefore planned to deepen the existing shafts to a further depth of 180 m and equip and install, ore handling system and allied excavations and mine development as phase II (the "**Project**").

1.2 Production Shaft

The production Shaft is sunk up to (-) 86 ML where the spillage cleaning level is established through a 3.4 m dia shaft (known as BGML Shaft). The purpose of this BGML SHAFT was for cleaning the spillage of the Production Shaft. The deepening of the Production Shaft was planned by deepening the BGML Shaft from (-) 85 ML to below (-) 120 ML and opening a drive at (-) 120 ML and drive towards production Shaft for about 35 mts and make arrangement for installation of a sinking winder with sheave pulley etc. However, after driving about 17.5 mts towards the production shaft a bad ground was encountered in March, 2015 along with inrush of water from adjoining shot holes. 3 diamond drilling holes were drilled and the core was collected. An alternative design was made with a view to keep the bad ground on the foot. However, while doing this the area around the production shaft needs to be consolidated by pressure grouting using chemicals etc. if needed. An alternate scheme was prepared to tackle the crushed zone and take up the Production Shaft Sinking which is held up for over an year due to this problem. The concept of the scheme is to keep the crushed zone at the floor as it will be much easier and safe to tackle the crushed zone. A drive is proposed from BGML Shaft to Production Shaft at (-) 106 ML for hoist installation and for handling the muck generated during the sinking from Production Shaft via BGML Shaft for further hoisting. The weak zone of around 20m vertical extent will be consolidated by drilling holes in radial fashion with toe spacing of around 5 m at every 1.5 m vertical interval and grouted by high pressure cement injection or any other means the successful bidder proposes. It would be responsibility of the successful bidder to consolidate the bad ground before or while sinking.

The production Shaft being sunk will serve for another 30-40 years. The stability of the Production Shaft is very important in the long run.

1.3 Service Shaft

The service shaft is sunk up to (-) 18 ML. It has to be sunk up to (-) 196 ML in II phase of Khetri Mine. For this one incline (-31⁰) has been developed from 0 ML to (-)60 ML. Excavation for sinking winder chamber, pulley raise and rope raise has also been developed at (-)60 ML. Sinking of service shaft has been started and sunk up to approx. (-) 70 ML.

1.4 New Ore Pass

One new ore pass has been sunk from 0 ML to (-) 299.8 ML as per earlier system of II phase up to (-) 300 ML. This ore pass has to be terminated at (-) 180ML and shall be utilizes for development of approach drive and ore crushing system below (-) 180ML. The approach drive has already been developed about 44 m. This ore pass is proposed to work as second out let for below 0 mRL workings. And an ore pass by drop raising method is proposed to be prepared.

1.5 Waste hoisting arrangement

Waste generated in all the activities of production shaft, service shaft, and drive development will be hoisted and trammed up to waste pass (0ML to 180ML) at 0ML and the waste rock will further hoisted up to 180ML. The waste rock will be dumped into void stope at 180ML.

2.1 Geology of Khetri Copper Mine area

The major rock formations in Khetri Mine area are represented by metamorphosed arenaceous and argillaceous sediments with intercalated calcareous bands. These rocks are intruded by younger basic rocks and acidic intrusions of granite, pegmatite and quartz veins. The succession of major rock units found in and around Khetri mine area (from east/footwall to west/hanging wall) is as given under:-

Ajabgarh	5. Sericite Quartzite					
Group	4. Phyllite/andalusite schist					
	3. Garnet-chlorite-quartzite/schist+amphibole+biotite,					
	amphibole rich rock, amphibole magnetite rock					
	Gradational Contact					
Alwar	2. Amphibole quartzite with bands of amphibole rich					

1. Feldspathic quartzite

Amphibole quartzite, garnet chlorite quartzite/schist, amphibole rich rock and amphibole magnetite rocks are the host rocks of the main lodes / ore lenses. Feldspathic quartzite represents foot wall limit while phyllite marks the hanging wall limit of the copper mineralization. Mine has mainly following litho units:

- 01. Phyllite/andalusite schist:
- 02. Garnet chlorite quartzite/schist + amphibole + biotite, amphibole richRock, amphibole magnetite rock
- 03. Amphibole quartzite
- 04. Felspathic quartzite
- 05. Dolomite and impure marble
- 06. Intrusives

The strike of the rock varies from NE-SW to NNE – SSW with dips between 35 to 65^{0} due NW. There are mainly three types are joints observed in the mine

- $01. \text{ N}120^{0} \text{ to N}150^{0} \text{ dipping at } 60^{0} \text{ to } 80^{0} \text{ due NE or SW}$
- $02. \text{ N } 20^{0} \text{ to N } 50^{0} \text{ dipping at } 50^{0} \text{ to } 60^{0} \text{ due NW or SE}$
- 03. N 05^{0} to N 30^{0} dipping at 50^{0} to 60^{0} due NW

One important transverse fault termed as "Kudhan Fault" apart from number of criss-cross / parallel joints and small transverse faults exist in the area. Strike of the Kudhan Fault is around N45⁰W – S45⁰E dipping 65⁰ due NE. At upper levels (400 & 350 mRLs) the fault affected zone is around 20 to 25 mtrs wide, it is gradually reducing in depth and it has crossed Production Shaft at +35 mRL with a width of around 2 to 3 mtrs. Below "0" mRL, fault affected zone is gradually going away from the shaft. Apart from Kudhan Fault, there are several local weak / crushed / disturbed zones are present in the vicinity of the shaft which may re-occur below "0" mRL also.

The mine has a strike length of 4.00 Kms (from 2200 to 6200 local latitudes) and divided into two blocks namely Khetri Block (2200 to 5000 latitudes) & Banwas Block (5000 to 6200 latitude). There is continuous production from the mine since 1972 & has produced around 25.85 million tonnes till 31.03.2-16 and around 48.95 Million Tonnes copper ore reserves as on 01.04.2016 is still available in the mines. Presently mine is producing @ 0.60 Million Tonnes copper ore per year. Expansion activities are under way to enhance the copper ore production from 0.60 Million Tonnes to 1.50 Million Tonnes per year.

While developing cross cut at 3500 Latitude between 1530 & 1500 Departure, i.e., from BGML Shaft towards production shaft at (-) 120 mRL of the mine, up to a distance of around 16.50 meters

(from centre of BGML Shaft) hard complact Quartz – Chlorite – Biotite Schist + / - Garnet rock unit was found but immediately after 16.50 mtrs crushed / weak zone had been encountered on 17.03.2015. The rock unit of the crushed zone is also Quartzite – chlorite – Biotite Schist &. Dip of the shear zone is around 43⁰.

2.2 The Physico-Mechanical Properties of the rock of Khetri Mine:

Sr. No.	Phyco-Mechanical Properties	Value
01.	UCS	F/w 97 MPa, H/W 160 MPa
02.	Cohesion	17.83 MPa
03.	Friction Angle	42.6 Degree
04.	Young's modulus	104 GPa
05.	Poisson's ratio	0.22
06.	RMR	65
07.	Insitu strss condition	
	a). Vertical insitu stree (Sv)	Sv = 0.03H MPa
	b). Major Horizontal Insitu Stree (SH).	SH = 6.87 + 0.007H MPa
	c). Minor Horizontal Insitu Stress (Sh)	Sh = 4.57 + 0.0051H Mpa
	d). major Horizontal Insitu Stress direction is along strike	

2.3 The In-situ Stress:

The National Institute of Rock Mechanics (NIRM) had conducted In-situ Stress determination studies by hydrofracturing method at Khetri Mine during 1991-92 and in1993. The combined results of these areas indicated that the horizontal principal's stresses vary with the depth as per following equations:

$$\begin{split} S_H &= 1.955 + 0.0327*z \\ S_h &= 2.557 + 0.0148*z \end{split}$$

Where z = depth below the surface.

 $S_v = 0.02943*z$

The major principal stress direction is given as N25⁰E. The strike of the ore body is the north block is N60⁰E. As the strike of the ore body is inclined to the principal stress directions, the horizontal principal stress were resolved into two components, one parallel and another perpendicular to the strike of the ore body. The variation of ore body stresses perpendicular to the strike of the ore body was evaluated as:

$$\alpha_{XX} = 2.359 + 0.0207*z \text{ (across the ore body)}$$

$$\alpha_{xx} = 2.153 + 0.0268*z \text{ (along the ore body)}$$

The vertical stress was assumed to be due to weight of the overburden strata. Its variation with depth is the same as that of S_{ν} :

$$\alpha_{yy}=0.02943*z$$











