



# ଓଡ଼ିଶା ବିଦ୍ୟୁତ୍ ଶକ୍ତି ସଂଚାରଣ ନିଗମ ଲିମିଟେଡ.

## ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Govt. of Odisha undertaking)

CIN – U40102OR2004SGC007553

REGD. OFFICE: JANPATH, BHUBANESWAR-751022,

OFFICE OF THE GENERAL MANAGER (Elect)

EHT (O&M) CIRCLE, BHUBANESWAR

AT-Grid Sub-Station, Chandaka, PO-KIIT

Bhubaneswar-751024

E-mail - ehtm.cle.bbs@optcl.co.in

E-TENDER SPECIFICATION NO:- EHTM/GM/11/BBS/2022-23

“PROVISION OF WIRE MESH FENCING OF 132 KV & 33 KV SWITCHYARD AT 132 /33  
KV GRID SUB-STATION KHURDA UNDER EHT (O&M) DIVISION, KHURDA”

### PART-I

SECTION-I-	INSTRUCTION TO BIDDERS
SECTION-II-	GENERAL TERMS & CONDITIONS OF CONTRACT
SECTION-III-	LIST OF ANNEXURE
SECTION-IV-	DATASHEETS

### PART-II

PRICE BID & COMMERCIAL BIDS (EXCEL SHEET FORMAT)

<b>Request for online tender documents:</b>	<b>From Dt. 08.04.2023 (11:00 Hrs)</b>
	<b>To Dt. 28.04.2023 (16:00 Hrs)</b>
<b>Issue of online tender documents (bid sheets):</b>	<b>From Dt. 08.04.2023 (11:01 Hrs)</b>
	<b>To Dt. 28.04.2023 (16:01 Hrs)</b>
<b>Last date of submission of online tender:</b>	<b>Up to Dt. 28.04.2023 (17.00 Hrs)</b>
<b>Date of opening of Tender</b>	<b>on Dt. 02.05.2023 (14:30 Hrs)</b>

## **TELEPHONES / CONTACTS**

1. General Manager: 9438907492
2. TA to General Manager: 943890754414

### **NOTE: -**

1. In case the due date for opening of tender happens to be a holiday, then tenders would be received & opened on the next working day at the same time.
2. Please note that the tenders against this tender enquiry are being invited **through e-tendering mode**. In case of any clarification the prospective bidders may contact this office as mentioned above.
3. **The prospective bidders are requested to get their digital signatures (Class-3) well in time** for participation in the tender and no request for extension on this account will be entertained.
4. **Manual tenders in any form/case will not be accepted.**



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For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD, General Manager, EHT (O&M) Circle, Bhubaneswar invites Tenders from reputed bidders fulfilling the eligibility criteria and must possess valid GST registration certificate, EPF registration certificate & ESI registration certificate for the work of “**PROVISION OF WIRE MESH FENCING OF 132 KV & 33 KV SWITCHYARD AT 132/33 KV GRID SUB-STATION KHURDA UNDER EHT (O&M) DIVISION, KHURDA**”. The interested bidders would be required to enroll themselves on the tender portal [www.tenderwizard.com/OPTCL](http://www.tenderwizard.com/OPTCL). Complete set of bidding documents shall be available at [www.tenderwizard.com/OPTCL](http://www.tenderwizard.com/OPTCL) from **08.04.2023 (11:01 Hrs) up to 28.04.2023 (16:01 Hrs)**. Interested bidders may visit OPTCL’s official web site <http://www.optcl.co.in> and [www.tenderwizard.com/OPTCL](http://www.tenderwizard.com/OPTCL) for detail specification.

N.B:- All subsequent addendums/corrigendum to the tender shall be hosted in the OPTCL’s official web site <http://www.optcl.co.in> and [www.tenderwizard.com/OPTCL](http://www.tenderwizard.com/OPTCL) **only**.

**GENERAL MANAGER**

**EHT (O&M) CIRCLE, BHUBANESWAR**



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## ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Govt. of Odisha undertaking)

CIN – U40102OR2004SGC007553

REGD. OFFICE: JANPATH, BHUBANESWAR-751022,  
OFFICE OF THE GENERAL MANAGER (Elect)  
EHT (O&M) CIRCLE, BHUBANESWAR  
AT-Grid Sub-Station, Chandaka, PO-KIIT  
Bhubaneswar-751024

E-mail - ehtm.cle.bbs@optcl.co.in

E-TENDER NOTICE NO: 11/BBS/2022

### NOTICE INVITING TENDER

For and on behalf of the ODISHA POWER TRANSMISSION CORPORATION LTD., the undersigned invites bids from the eligible bidders under **two-part bidding** system in **e-tendering mode** only as per the following details.

*Tender Specification No: EHTM/CLE/GM/11/BBS/2022-23*

<b>Request for online tender documents:</b>	<b>From Dt. 08.04.2023 (11:00 Hrs)</b>
	<b>To Dt. 28.04.2023 (16:00 Hrs)</b>
<b>Issue of online tender documents (bid sheets):</b>	<b>From Dt. 08.04.2023 (11:01 Hrs)</b>
	<b>To Dt. 28.04.2023 (16:01 Hrs)</b>
<b>Last date of submission of online tender:</b>	<b>Up to Dt. 28.04.2023 (17.00 Hrs)</b>
<b>Date of opening of Tender</b>	<b>on Dt. 02.05.2023 (14:30 Hrs)</b>
<b>Cost of Tender Spec Document:</b>	<b>Rs. 6,000/ + Rs. 1080/- (GST@18%)= Rs. 7,080/-</b>
<b>Earnest Money Deposit:</b>	<b>Rs. 33,000/-</b>
<b>Tender Processing Fee:</b>	<b>Rs. 3,850/- (Including GST @ 18%)</b>
	<b>(Rupees Three Thousand Eight hundred Fifty only)</b>

**ESTIMATED AMOUNT: Rs. 32,62,224.00/-(INCLUSIVE OF GST@18%)**

The bidders can view the tender documents from website free of cost.

## **ELIGIBILITY FOR SUBMISSION OF BIDS:-**

Bidders should not have any legal suit against OPTCL / GRIDCO Ltd / SLDC are only eligible for submission of Bids. Firms banned / blacklisted for business dealings by any organization are not eligible to participate in the tender. Participation in the tender by suppression of the above facts shall invite penal action, whenever detected.

**The bidders must have in possession of following qualifications for participation in tender:-**

- 1. Annual turnover should be more than Rupees fifty lakhs for last three years. Balance Sheet and Profit & Loss Account for last three Financial Years duly audited by a Chartered Accountant shall be submitted towards claim of the turnover.**
- 2. Solvency certificate not less than Rupees fifty lakh obtained duly certified by a Chartered Accountant/ Bank Authorities.**
- 3. GST Registration Certificate.**
- 4. Civil (B/C-Class) Contractor License certificate.**
- 5. Electrical Contractor HT/EHT License certificate**
- 6. Permanent Account Number (PAN) issued by Income Tax Department.**
- 7. Income Tax return of last Three years.**

The bidders can view the tender documents from website free of cost. The bidders who want to participate in the tender shall have to pay **Rs. 7,080/- (Rupees Seven Thousand Eighty only) non-refundable including GST @ 18%** towards the cost of tender document, **in the form of Demand draft** only, drawn in favour of **EHT (O&M) Circle, OPTCL, Bhubaneswar, Payable at Bhubaneswar** and the same is to be submitted to the office of the undersigned on or before the last date & time of submission of tender.

**The bidders shall have to submit a non refundable amount of Rs 3,850/- (Rupees Three Thousand Eight hundred Fifty only) towards the tender processing fee through e-payment gate way.**

*(NOTE: For deposit of tender processing fee to K.S.E.D.C. Ltd. Bangalore, the bidder can use various modes of e-payment facility available through Tender wizard Portal, i.e. by Credit Card, Debit Card, Net Banking)*

The payment acknowledgement slip submitted along with the **EMD** & tender cost at the office of the undersigned on or before the last date & time of submission of tender.

The bidders shall scan the Demand Draft towards Tender paper Cost, EMD and acknowledgement slip for tender processing fee and upload the same in the prescribed form in **.gif** or **.jpg** format in addition to sending the original as stated above.

The prospective bidders are advised to register their user ID, Password, company ID from website [www.tenderwizard.com/OPTCL](http://www.tenderwizard.com/OPTCL) by clicking on hyper link “Register Me”.

Any clarifications regarding the scope of work and technical features of the tender can be had from the undersigned during office hours.

**GENERAL MANAGER  
EHT (O&M) CIRCLE, BHUBANESWAR**

**PART-I**  
**SECTION-I**  
**INSTRUCTIONS TO TENDERER**

**1. Submission of Bids: -**

The bidder shall submit the bid in Electronic Mode only i.e **www.tenderwizard.com/OPTCL**. The bidder must ensure that the bids are received in the specified website of the OPTCL by the date and time indicated in the Tender notice. Bids submitted by telex/telegram will not be accepted. No request to collect the Bids in physical form will be entertained by the OPTCL.

OPTCL reserves the right to reject any bid, which is not submitted according to the instruction, stipulated above. The participants to the tender should be registered under GST act and other as applicable.

**1. For all the users it is mandatory to avail the Class 3 Digital Signatures.**

2. Manufacturers/ Dealers/ Bidders / Suppliers are requested to follow the below mentioned steps for Registration:

- a. Click “Register”, fill the online registration form.
- b. Pay the amount of **Rs. 2,360/- through E-payment gateway.**
- c. This registration is valid for one year.
- d. Send the acknowledgment copy for verification.
- e. As soon as the verification is being done the e-tender user id will be enabled.

3. After viewing Tender Notification, if bidder intends to participate in tender, he has to use his e-tendering User Id and Password which has been received after registration and acquisition of DSCs.

4. If any Bidder wants to participate in the tender he will have to follow the instructions given below:

- a. Insert the PKI (which consist of your Digital Signature Certificate – Class 3) in your System.  
(Note: Make sure that necessary software of PKI is installed in your system).
- b. Click / Double Click to open the Microsoft Internet Explorer (This icon will be located on the Desktop of the computer).
- c. Go to Start > Programs > Internet Explorer.
- d. Type **www.tenderwizard.com/OPTCL** in the address bar, to access the Login Screen.
- e. Enter e-tender User Id and Password, click on “Go”.
- f. Click on “Click here to login” for selecting the Digital Signature Certificate.
  - Select the Certificate and enter DSC Password.
  - Re-enter the e-Procurement User Id Password

5. To make a request for Tender Document, Bidders will have to follow below mentioned steps.

- a) Click “Un Applied” to view / apply for new tenders.
- b) Click on Request icon for online request.

- c) Enter the required fields including details of DD for tender Processing fee.
6. After making the request Bidders will receive the Bid Documents which can be checked and downloaded by following the steps mentioned below:
  - a) Click to view the tender documents which are received by the user.
  - b) Tender document screen appears.
  - c) Click “Click here to download” to download the documents.
7. After completing all the formalities Bidders will have to submit the tender and they must take care of following instructions.
  - a) Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not.
  - b) Note down / take a print of bid control number once it displayed on the screen
8. Tender Opening event can be viewed online.
9. Competitors bid sheets are available in the website for all.
10. **For any e-tendering assistant contact help desk number mentioned below.**
  - **Bangalore – 080- 40482000.**
  - **Mr. Satamanyu – mob: 09937140591**

## **2. DIVISION OF SPECIFICATION.**

The specification is mainly divided into two parts viz. Part-I & Part-II.

### **Part-I Consists of**

- |              |                                |
|--------------|--------------------------------|
| SECTION-I-   | INSTRUCTION TO BIDDERS.        |
| SECTION-II-  | GENERAL CONDITIONS OF CONTRACT |
| SECTION-III- | LIST OF ANNEXURE               |
| SECTION-IV-  | DATASHEETS.                    |



## **Part-II Consists of**

COMMERCIAL BID and PRICE SCHEDULE (excel sheet)

The Bidders are required to submit the tenders in two part viz. Commercial & Price bid.

### **3. Purchaser's Right Regarding Alteration of Quantities Tendered.**

The Purchaser may alter the quantities of work at the time of placing orders. Initially the purchaser may place orders for lesser quantity with full freedom to place extension orders for further quantity under similar terms and conditions of the original orders. **Orders may also be split among more than one bidder for any particular item or division wise for the work, if considered necessary in the interest of the OPTCL.**

### **4. Purchaser's right to accept/reject bids:**

The purchaser reserves the right to reject any or all the tenders without assigning any reasons what so ever if it is in the interest of OPTCL, under the existing circumstances.

### **5. Mode of submission of Tenders.**

[A] Tenders shall be submitted in electronic mode only. ([www.tenderwizard.com/](http://www.tenderwizard.com/) OPTCL)

[B] **E-mail tenders** shall not be accepted under any circumstances.

### **6. Validity of the Bids: -**

The bidders are requested to keep the validity of their offer for a period of **180** days from the date of opening of the tender, failing which the tenders will be rejected.

### **7. PRICE: -**

The bidders are advised to quote their rate as per the price schedule attached with this specification and shall remain firm exclusive of all taxes & duties, etc. within the validity of the tender.

### **Bidders to be fully conversant with the clauses of the Specification:**

Bidders are expected to be fully conversant with the meaning of all the clauses of the specification before submitting their tenders. In case of doubt regarding the meaning of any clause, the bidder may seek clarification in writing from the GM (Elect.), EHT (O&M) Circle, Bhubaneswar, This, however, does not entitle the bidder to ask for time beyond due date, fixed for receipt of tender.

## **8. e-Reverse Auction process shall be resorted to in the tender as follows:**

### **A) STRATEGY FOR E-REVERSE AUCTION**

- (i) Bidders are required to go through the guide lines given below and submit their acceptance to the same.
- (ii) e-Reverse Auction (RA) will be conducted in e-tender portal of OPTCL on specified date and time, while bidders shall quote from their own offices/places of their choice. Internet connectivity shall be ensured by the respective agencies/bidders themselves.
- (iii) Demonstration/ training (if not trained earlier) of bidder's nominated person(s), shall be done by KEONICS to explain all the rules related to e-Reverse Auction/ Business Rule document to be adopted.

### **B) Procedure for electronic Reverse Auctioning (e-RA)**

- (i) The e-RA shall be conducted on [www.tenderwizard.com/OPTCL](http://www.tenderwizard.com/OPTCL) only.
- (ii) Bidder has to submit letter towards agreement to the Process related Terms & Conditions for e-Reverse Auction, as per (Reverse Auction Process Compliance Form at **Annexure-IVA**). In non-receipt of the same, vendors will not be allowed to participate in e-RA.
- (iii) e-RA shall be carried out after opening of Price bids and completion of Price bid evaluation, which will be intimated only to the techno-commercially qualified bidders by OPTCL as per procedure given below.

Prior intimation/ Notice for RA invitation will be given to techno-commercially qualified bidders regarding the date & time of opening of the e-RA.

The start bid price (SBP) for e-Reverse Auction of each bidder under a particular package shall be the L1 evaluated price for the subject package including Taxes & Duties for the total scope for subject Package. Taking the above discovered L1 price as the upper limit e-RA will be conducted to determine the lowest possible price.

Reverse Auction will be conducted amongst first 50% of the technically qualified bidders arranged in order of prices from lowest to highest, as L1, L2, L3-----Ln, and L1 price will be discovered. Minimum of 3 bidders shall be eligible for e RA. (eg. If 4 bidders are financially evaluated then the L1, L2 and L3 bidders shall be eligible for e-RA). Number of bidders eligible for participating in RA would be rounded off to next higher integer value if number of technically qualified bidders is odd (e.g. if 7 bids are technically qualified, then RA will be conducted amongst L1 to L4).

However, in case only two bidders are found to be responsive, e-RA would be carried out with both the parties without any elimination. However, OPTCL reserves the right to invite the evaluated L1 bidder for negotiation without conducting the e-RA.

In case of price submitted by any bidder is found to be abnormal, OPTCL reserves the right to reject the bid of the bidder(s).

Rank of bidders would be displayed as per the total cost to OPTCL, i.e. including Taxes and Duties payable by OPTCL as per the provisions of the bidding document & after e-RA process is over.

- iv) OPTCL reserves the right to conduct e-RA and it is obligatory on part of bidder(s) invited to participate in e-RA process once they have responded to the techno-commercial bid.
- v) Names of bidders/ vendors shall not be disclosed during the e-RA process. Names of bidders/ vendors shall be anonymously masked in the e-RA process.
- In case of RA, start/ reference price and step value of decrement shall be indicated to the bidders at the start of the auction. Any participating bidder can bid one or multiple step decrement lower than the prevailing lowest bid at that time. The Bidder shall be able to view Bid Start Price, Bid Decrement Value, Prevailing Lowest Bid value, last Bid Placed by him and time left for bidding.
- The step value of decrement in a package to be offered by bidder (the minimum amount of reduction in the total bid price including all taxes & duties during auction) , shall be kept at 0.15% of L1 bidder's final evaluated price (or) at approved amount as decided by OPTCL.
- Bidders can only quote any value lower than their previous quoted price. However, at no stage, increase in Price will be permissible.
- At any point during Reverse Auction, bidding price field shall remain enabled for the bidders. The total reverse auction period shall be unlimited and the initial auction period (1<sup>st</sup> slot) will be of thirty (30) minutes with provision of auto extension by ten (10) minutes from the schedule/extended closing time. If any fresh lower bid is received in last ten minutes of auction period or extended auction period ,the auction shall get extended automatically for another 10 minutes. In case there is no Bid received during schedule /extended slot , the Auction shall get closed automatically without further extension.

- However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the period of e-reverse auction to avoid complication related with internet connectivity, network problem, system crash down, power failure etc.

vi) After conclusion of e-Reverse Auction i.e (Closing Price in Reverse Auction will be taken as offered price by the L1 bidder), decrease in price of individual head of the template shall be considered proportionately on all individual line items of the respective head of the price schedule of the successful L1 bidder.

Any bid received at the tender wizard server end subsequent to closure of the e-RA shall be summarily rejected and shall not be considered as a valid bid under whatsoever circumstances. For this purpose, tender wizard server log shall prevail.

The bidder shall not involve himself or any of his representatives in price manipulation of any kind directly or indirectly by communicating with other bidders.

During Reverse Auction, If no bid is received within the specified time, OPTCL, at its discretion, may decide to close the reverse auction process/ proceed with conventional mode of tendering [ Evaluation of Part-II (price bid) submitted by bidders earlier].

vii) Consequent upon completion of e-Reverse Auction, OPTCL's decision on award of contract shall be final and binding on the bidders.

OPTCL shall be at liberty to call the L1 bidder for further process/ negotiation and also at liberty to cancel the e-reverse auction process/ re-tender at any time, without assigning any reason thereof. OPTCL can decide to reschedule or cancel any reverse auction: the bidders shall be informed accordingly.

OPTCL/ Service Provider shall not have any liability to bidders for any interruption or delay in access to the e-Tender site/ Reverse Auction link irrespective of the cause.

## **9. Documents to Accompany Bids.**

Bidders are required to submit tenders in the following manner:

- i) Declaration Form as per **Annexure-I** (duly signed) to be uploaded in .pdf format.
- ii) EMD (scanned copy is to be uploaded)
- iii) Abstract of Terms & conditions in prescribed proforma as per **Annexure-II**. To be entered in the bid sheets provided.
- iv) General Terms & Conditions of contract as per Section-II of the Specification. (All the required documents are to be uploaded.)
- v) Data on past experience if any **as per** the Specification.(Scanned copy to be uploaded)
- vi) GST Registration certificate & permanent account number [PAN] of the firm is required under Income tax Act. (Scanned copy to be uploaded).
- vii) Civil (B/C-Class) Contractor License certificate & Electrical Contractor HT/EHT License certificate.(Scanned copy to be uploaded).

viii) Any other document required, is to be uploaded.

#### **10. Conditional Offer:**

Conditional offer shall not be accepted.

#### **12. General: -**

- i) The Bidder must get him registered in tender portal by paying an amount of **Rs. 2360/- through e-payment mode only**. This registration is valid for two years.
- ii) The tender paper cost (Form fee non-refundable) for an amount of **Rs. 7,080/- is to be paid in shape of DD**.
- iii) The tender processing fee for an amount of **Rs. 3,850/- (Non-refundable)** is to be paid in e-payment mode only.
- iv) In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the bidder.
- v) Notice inviting tender shall form part of this specification.
- vi) It should be distinctly understood that the price bid shall contain only details/documents relating to price, as mentioned herein above.
- vii) **The Bidder must submit the cost of tender document and EMD in shape of DD in a sealed cover envelope super scribing the Tender Notice No. & Date of opening of tender clearly on the envelope cover. The said envelope is to be submitted in the office of the purchaser/Tenderer on or before the last date and time of submission of tender.**
- viii) **The estimated quantity is indicated in this tender document for reference. The bidders are advised to visit the site; assess the quantum of work involvement and make themselves acquainted with the site conditions before submission of tender.**
- ix) The Bidder must observe all the safety rules while working in EHV environment.

**SECTION-II**  
**GENERAL TERMS AND CONDITIONS OF CONTRACT [G.T.C.C.]**

**1. SCOPE OF THE CONTRACT:-**

The specification covers “**PROVISION OF WIRE MESH FENCING OF 132 KV & 33 KV SWITCHYARD AT 132 /33 KV GRID SUB-STATION KHURDA UNDER EHT (O&M) DIVISION, KHURDA**” as per the technical requirement mentioned in Section – IV of the tender specification shown in the schedule of quantity including supply of all required materials as mentioned below:

**2. MANNER OF EXECUTION OF ABOVE WORK:-**

**(a) EXCAVATION**

Whenever water table is met during the excavation, it shall be dewatered and water table shall be maintained below the bottom of the excavation level during excavation, concreting and backfilling.

When embankments are to be constructed on slopes of 15% or greater, benches or steps with horizontal and vertical faces shall be cut in the original slope prior to placement of embankment material. Vertical faces shall measure not more than one metre in height.

Embankments adjacent to abutments, culverts, retaining walls and similar structures shall be constructed by compacting the material in successive uniform horizontal layers not exceeding 15 cm in thickness, (of loose material before compaction). Each layer shall be compacted as required by means of mechanical tampers approved by the Engg Incharge Rocks larger than ten centimetres shall not be placed in embankment adjacent to structures.

Earth embankments of roadways and site areas adjacent to buildings shall be placed in successive uniform horizontal layers not exceeding 20 cm in thickness in loose stage measurement and compacted to the full width specified. The upper surface of the embankment shall be shaped so as to provide complete drainage of surface water at all times.

Excavations shall be of the minimum sizes necessary for the proper construction of the works, and excavations shall not be kept open for periods longer than that reasonably required to construct the works. The Contractor shall take all precautions necessary to ensure that the bottoms of excavations are protected from deterioration and that the excavations are carried out in such a manner that adjacent foundations, pipes or such like are not undermined, damaged or weakened in any way. Any excavation taken out below the proper level without approval shall be made good at the expense of the Contractor using concrete or other material as directed.

All excavated materials obtained from excavation shall remain OPTCL`s property. The useful portion shall be separated from the useless one and deposited in regular stacks at places indicated and as directed by the Engg. In-charge

Rock which does not require blasting, wedging or similar means for excavation is considered as ordinary rock.. This may be quarried or split with crowbars or pickaxes and includes lime stone, sand stone, hard laterite, hard conglomerate and reinforced cement concrete below ground level. It will also include rock which is normally hard requiring blasting when dry but can be excavated without blasting, wedging or similar means when wet. It may require light blasting for loosening materials, but this will not any way entitle the material to be classified as hard rock.

## **(b) BACKFILL**

As soon as possible after the permanent works are sufficiently hard and have been inspected and approved, backfill shall be placed where necessary and thoroughly consolidated in layers not exceeding two hundred (200) millimetres in depth.

On completion of structures, the earth surrounding them shall be accurately finished to the line and grade as shown on the drawings. Finished surfaces shall be free of irregularities and depressions.

The soil to be used for back filling purposes shall be from the excavated earth or from borrow pits, as directed by the Engg. In-charge.

The thickness of fill material under the foundations shall be such that the maximum pressure from the footing, transferred through the fill material and distributed onto the original undisturbed soil will not exceed the allowable soil bearing pressure of the original undisturbed soil.

Where compacted fill is required it shall consist of suitable sand, or other selective inorganic material, subject to approval by the Engg Incharge. The filling shall be done with locally available sand. The filled in sand shall be kept immersed in water for sufficient time to ensure compaction, if so desired by the Engg Incharge.

## **(c) DISPOSAL OF SURPLUS**

Surplus excavated material not required or not approved for fill or backfill shall be loaded and deposited either on or off site as directed. The Contractor shall not delay disposal of surplus material after receipt of instructions from the Engg Incharge. The contractor shall arrange to transport the excavated earth by mechanical transport, not necessarily on Pucca roads. The soil so transported shall be stacked and levelled neatly and dressed. The location where the soil is to be stacked / disposed shall be as directed by the Engg In-charge.

## **(d) PCC & RCC CONSTRUCTION**

Concrete shall conform to the requirements of IS 456 and all the tests shall be conducted as per relevant Indian Standard Codes.

If the site is sloping, the foundation height will be adjusted to maintain the exact level of the top of structures to compensate for such slopes.

A minimum of 75 mm thick lean mix concrete (1:3:6) shall be provided below all underground Colum etc. to provide a base for construction.

Concrete made with Portland cement(OPC-43 grade) shall be carefully cured and special consideration shall be given during the placing of concrete and removal of shuttering.

The design and detailing of foundations shall be done based on the approved soil data and sub-soil conditions as well as for all possible critical loads and combinations thereof. Spread footing foundations or pile foundations as may be required based on soil and subsoil conditions and superimposed loads shall be provided.

If pile foundations are adopted, the same shall be cast-in-situ, driven, bored, precast or underreamed type as per relevant IS. Only RCC piles shall be provided. Suitability of the adopted pile foundations shall be justified by way of full design calculations. Detailed design calculations shall be submitted by the contractor showing complete details of piles and pile groups proposed to be used. Necessary initial load tests shall also be carried out by the contractor at their entire cost to establish the pile design capacity. Only after the design capacity of piles has been established, shall the Contractor

commence of piling. All the design and testing work shall be planned in such a way that these shall not cause any delay in project completion

#### **I. Cement:-**

The cement to be used shall be the best quality of its type.

All cement shall be sampled and tested in accordance with Indian Standards.

Cement shall be Ordinary Portland Cement as per I.S.269-1976 or Portland Slag Cement as per I.S. 455-1976

The Ordinary Portland cement(OPC-43 grade) used in concrete shall conform to IS 269.

Requirement of sulphate resistant cement (SRC) for sub structural works shall be decided in accordance with the Indian Standards based on the findings of the detailed soil investigation to be carried out by the contractor.

High Alumina cement shall NOT be used

#### **II. Delivery and storage of cement**

Cement shall be delivered to the site in bulk or in sound and properly sealed bags and while being loaded or unloaded whether conveyed in vehicles or by mechanical means, and during transit to the concrete mixers, must be protected from the weather by effective coverings. Efficient screens are to be supplied and erected to prevent wastage of cement during strong winds.

If the cement is delivered in bulk, the Contractor shall provide at his own cost approved silos of adequate size and number to store sufficient cement to ensure continuity of work. The cement shall be placed in these silos immediately it has been delivered on the site. Suitable precautions shall be taken during unloading to ensure that the resulting dust does not constitute a nuisance.

If the cement is delivered in bags, the Contractor shall provide at his own cost perfectly waterproof and well-ventilated sheds having a floor of wood or concrete raised at least 150 mm above the ground. The sheds shall be large enough to store sufficient cement to ensure continuity of work. Each consignment of each type of cement shall be stacked separately therein. On delivery at site the cement shall at once be placed in these sheds and shall be used in the order in which it has been delivered.

**All cement shall be used within 3 months of the date of manufacture.**

#### **III. Aggregate**

Coarse and fine aggregate shall conform to the requirements of IS 383-1970.

Sampling and testing of aggregates shall be in accordance with the relevant Indian Standard.

Fine and coarse aggregates shall be obtained from the same source and the Contractor shall ensure that material from the source is known to have a good service record over a long period of time.

Aggregate shall be hard and dense and free from earth, clay, loam and soft, clayey, shaley or decomposed stone, organic matter and other impurities

#### **IV. Steel bar reinforcement (FE500)**

Reinforcement shall comply with the appropriate Indian Standards.

All bar reinforcement shall be hot rolled steel except where the use of cold worked steel is specified on the drawings or otherwise approved.

The bars shall be round and free from corrosion, cracks, surface flaws, laminations, rough, jagged and imperfect edges and other defects.

The bar reinforcement shall be new, clean and of the lengths and diameters described on the Drawings and Schedules. Bars shall be transported and stored so that they remain clean, straight, undamaged and free from corrosion, rust or scale. Bars of different diameters shall be separately bundled.



## **V. Bending of reinforcement**

All steel bars are to be accurately bent cold to the shapes and sizes indicated on the Drawings and Schedules unless otherwise approved. Re-bending of bars and bending in position in the works shall not generally be allowed.

## **VI. Grades of concrete**

Concrete shall be either ordinary or controlled and in grades designated M10, M15, M20 and M25 as specified in IS 456 (latest edition). In addition, nominal mix of 1:3:6 and 1:4:8 of nominal size 40 mm maximum, or as indicated on drawings, or any other mix without any strength requirements as per mix design shall be used where specified.

➤ Fence Posts shall be set in 1:2:4 plain cement concrete block of minimum 0.4X0.4X1.35mtr depth. 75 mm thick PCC 1:3:6 shall be provided below concrete block.

➤ RCC (1:1.5:3) pillars to be considered. The height of the RCC pillars shall be 2.85 mtrs above finished ground level of the substation area and below the virgin soil a minimum of 300 mm depth.

Size of the RCC Pillar: 400mmX400mm.

Provision of MS rod: (a) Vertical 12 mm Ø: 6 Nos. (b) Stirrup: 8 mm Ø, 200 mm c/c.

There shall be provision of RCC Raft at the bottom of the RCC pillar. Size of the Raft shall be 1000mmX1000mmX300mm and depth. 75 mm thick PCC 1:3:6 shall be provided below concrete block.

## **VII. Brick**

The brick shall be machine moulded and made from suitable fly ash, cement, lime, gypsum, etc. They shall be free from cracks and nodules of free lime. They shall have smooth rectangular faces with sharp corners and shall be of uniform colour. The bricks shall be moulded with the frog of 100mm x 40 mm and 10mm to 20mm deep on one of its flat sides. The bricks shall not break when thrown on the ground from a height of 600mm.

The size of the conventional bricks shall be 250 x 125 x 75mm.

Only bricks of one standard size shall be used on one work. The following tolerance shall be permitted in the conventional size adopted in a particular work. Length +3.0mm, Width + 1.50mm, Height +1.50mm.

The crushing strength of the brick shall not be less than 75.0 Kg / Sq cm. The average water absorption shall be within 13- 15% by weight. Similarly, the porosity of the fly ash bricks shall be within 12-20%. Necessary test for crushing strength and water absorption shall be carried out as per IS 3495 : (Part I to Part IV) 1976.

Brick Masonary in ratio 1:5 with supply of First class K.B Bricks, good quality river sands

## **VIII. Cement Plastering**

Cement sand mortars of ratio (1:6) to be provided both the sides of the boundary wall Pillar of Gate.

## **(e) FENCING**

### **I. General**

Fencing shall be designed for the most critical loading combination taking into account wind forces, stability, tension on wires, minimum requirements as per this clause and relevant IS recommendations.

The un climbable or security, or anti-intruder fencing shall consist of chain link mesh, all as soon on the drawings and as specified below, supported on approved sections of structural steel.

The posts shall be erected truly vertical, and all posts and struts shall be set in concrete block foundations.

Concrete kerbing shall be provided between the fence posts as shown on the drawings.

## **II. Product Materials**

Fence fabric in accordance to IS :2721, and shall also meet the following requirements.

- Size of wire mesh net                      1" x 1" Square
- Size of coated wire                         3mm diameter
- Class of zinc coating                         medium
- Zinc coated after weaving

All mild steel parts used in the water retaining structure shall be hot-dip galvanised. The minimum coating of the zinc shall be 750 gm/sq.m. for galvanised structures and shall comply with IS:2629 and IS:2633. Galvanizing shall be checked and tested in accordance with IS:2629. The galvanizing shall be followed by the application of an etching primer and dipping in black bitumen.

The posts shall be of GI Angle size of 65\*65\*6 mm confirming to Yst-22 (Kg / sq. mm ). The length of the post shall be 2650mm.

The whole assembly of tubular post shall be **hot dip galvanized**. The zinc coating shall be minimum 615 gram per sq mm. The purity of the zinc shall be 99.95% as per IS:209.

### **GALVANIZATION DETAILS:-**

Mass of Zinc Coating:-460 Grams per Square meter.

Thickness of Zinc Coating:-64 micron & above

### **MAKE OF RAW MATERIALS:-**

HR sheets/Coils: -SAIL/TATA

ZINC:-Hindustan Zinc Ltd.

### **Fence fabric panel:**

Fencing shall be fabricated in the form of panel 1800X1800 mm. GI angle frame (35X35X5 mm) with bracing of 35X5 mm GI flat to be use in making frame contain 16 nos. of hole in GI angle and Flat shall be provided to fix the fence panel with posts. Fencing net shall be fixed to the post at 4 nos. hole by **required size** nuts and bolts. A washer shall also be provided below each nut. 1bolts and nuts including washers **shall also be supplied. All bolts, nuts and washer shall be hot dip galvanized.**

### **(f) GATE**

Gates shall be installed in locations shown on drawings. It contain 2 no. of Main Gate size of (5.5mtr\*1.8mtr.)and weight of 0.6MT each Double leaf along with one no of wicket Gate Size of (2mtr.\*1.8mtr.)and weight of 0.3MT ,single leaf

Bottom of gates shall be set approximately 40 mm above ground surface and necessary guiding mechanism (with roller on the bottom of the gate and fixed guider in the road)shall be fitted to avoid hanging of the main gate.

❖ **All Gate shall be hot dip Galvanized.**

❖ **The Design of Gate as per Engineer In-Charge**

**(g) Earthing**

In every 5Mtr. Consecutive Distance Earth Flat (50mm\*6mm) must be continuous running between existing Earth Mat and wire mesh Fencing in proper manner to be provided for safety purpose.

❖ **The Gate are most be earth by earth flat (50\*6mm)**

**3. SUPERVISION:-**

The supervision of the above work shall be done by the contractor or his representative. The Officer-In-Charge will cross check the services and may impose penalty for any negligence.

**4. DEFINITION OF TERMS:**

For the purpose of this specification and General Terms and Conditions of contract [GTCC], the following words shall have the meanings hereby indicated, except where otherwise described or defined.

4.1“The Bidder” shall mean the General Manager, EHT (O&M) Circle, Bhubaneswar for and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD., Bhubaneswar.

4.2“The Engineer” shall mean the Engineer appointed by the Purchaser for the purpose of this contract.

4.3 “Purchaser’s Representative” shall mean any person or persons or consulting firm appointed and remunerated by the Purchaser to supervise, inspect, test and examine workmanship and materials of the equipment to be supplied.

4.4“The supplier” shall mean the bidder whose bid has been accepted by the purchaser and shall include the bidder’s executives, administrators, successors and permitted assignees.

4.5“Equipment” shall mean and include all machinery, apparatus, materials, and articles to be provided under the contract by the suppliers.

4.6“Contract Price” shall mean the sum named in or calculated the bid.

4.7“General Condition” shall mean these General Terms and Conditions of Contract.

4.8The Specification” shall mean both the technical as well as commercial parts of the specification annexed to or issued with GTCC and shall include the **schedules** and drawings, attached thereto as well as all samples and pattern, if any.

4.9“Month” shall mean “Calendar month”.

4.10Writing” shall include any manuscript, type written, printed or other statement reproduction in any visible form and whether under seal or under hand.

4.11“FOR Destination costs” shall mean the cost of equipment and material at the consignee’s store/site. The cost is inclusive of all taxes, packing, forwarding and insurance and freight charges.

4.12 The term “Contract document” shall mean and include GTCC, specifications, schedules, drawings, form of tender, Notice Inviting Tender, covering letter, schedule of prices or the final General Conditions, any special conditions, applicable to the particular contract.

4.13 Terms and conditions not herein defined shall have the same meaning as are assigned to them in the Indian Contract Act, failing that in the ODISHA General Clauses Act.

5. **Tender schedule:-**

Schedule of different items of the works to be executed is given in the schedule of quantity. The bidders are required to quote their unit rates which should be inclusive of supply of all required materials at site including cost of materials and transportation to site and cost of all labour to execute the work. Taxes if any should be indicated separately.

6. All material, T&P and labour are to be supplied by the contractor as per the satisfaction of the site in-charge

7. **Programme and Progress of work**

The contractor shall submit the **TENTATIVE WORK ACTION PLAN (BBSR-AP/21)** of work as per the attached format along with the bid document. OPTCL may conduct Review of the work action plan during the tendering process. The final Work action plan shall be submitted before commencement of the work

8. **Language and measures:**

All documents pertaining to the contract including specifications, schedule, notices, correspondence, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

9. **Right to reject /accept any tender:**

**The purchaser reserves the right either to reject or to accept any or all tenders if the situation so warrants in the interest of the purchaser.** Orders may also be split up between different Bidders on individual merits of the Bidder. The purchaser has exclusive right to alter the quantities of materials/ equipment at the time of placing final purchase order. After placing of the order, the purchaser may defer the delivery schedule of the materials. It may be clearly understood by the Bidder that the purchaser need not assign any reason for any of the above action[s].

10. **Work Completion Period:**

The work shall be carried-out & completed within **90** days from the date of issue of Work order. The authority however reserves the right to reschedule the work program.

11. **Inspection:-** Prior to supply of all required materials like wire mesh , GI Angel , GI Flat ,Earthing pipe for execution of the above work , inspection of material at your factory premises is to be carried out by OPTCL engineer appointed by the undersigned. You are requested to intimate to this office for inspection after the material is ready and shall give at

least 10(Teen) days advance notice intimating the actual date of inspection. Dispatch instruction will be issued after approval of inspection report. The cost for above Inspection (which includes Transportation (AC), Fooding charges, hotel fees of double bed AC for maximum Three days) will be borne by the Firm without extra cost to OPTCL.

12. **Safety:** Adherence to statutory Safety practices at work site as per CEA regulations. The contractor will supply all the ISI marked personal protective equipment (PPE) like at their own cost to the deployed persons that shall work in Extra High Voltage System while adhering to mandatory work site safety practices. **The safety of contract personnel deployed by the contractor shall be sole responsibility of the contractor.**
13. **Compensation:** - The contractor shall be fully responsible for paying compensation, if any comes under the Workmen Compensation Act on account of workmen deployed by him during execution of work. OPTCL will no way be responsible for payment of any compensation. **So the contractors are advised to strictly adhere to the safety rules during execution of the work.**
14. **Extension of time:-** If the work could not be completed due to reasons beyond the control of Contractor, he shall without delay give notice to the Authority in writing for an extension of time. The Authority on receipt of such notice may agree to extend the completion period as may be reasonable but without prejudice to other terms and conditions of the contract.
15. **Price reduction:**
  - i).If the supplier fails to execute the above work as stipulated under Clause No.10 of this tender document or any extension granted thereto, the purchaser shall recover from the supplier price reduction for a sum of half percent (i.e. 0.5 percent) of the contract price for each calendar week or part thereof of limited to maximum of 10% of cost (exclusive of GST) of the undelivered portion of the materials/equipments and incomplete portion of the work.
  - ii).The total amount of price reduction schedule for delay under the contract will subject to a maximum of 5% (five percent) of the contract value (exclusive of GST) to be applicable after the completion of supply and erection before release of 10% amount of Security Deposit-cum-Performance Guarantee.
  - iii).OPTCL shall recover the price reduction schedule from the bill of the Contractor.
  - iv). However, if the price reduction schedule remain un-recovered the same shall be recovered from the contract performance Bank Guarantee.
16. **EMD:** The tender must be accompanied by an EMD of amount Rs. **48,000/-** in shape of Demand Draft to be drawn in favour of **EHT (O&M) Circle, OPTCL, Bhubaneswar, payable at Bhubaneswar** failing which, the tender will be liable for rejection. The E.M.D. of successful bidders will be returned after deposit of the required security deposit and the EMD of un-successful bidder will be returned after finalization of tender. No interest will be paid on E.M.D.

**17. Guarantee period**:- The work executed shall be guaranteed for a period of 12(twelve) months from the date of execution & certification by the Engineer-in-Charge. The guarantee certificate shall be furnished in triplicate to the undersigned for his approval. Any defect if noticed during this period shall be rectified free of cost provided such defects are due to bad workmanship, bad materials used upon written notice from the authority concerned.

**18. Security-cum-performance deposit**: The successful tenderers will be required to deposit a sum amounting to 10% of value of the contract in shape of Bank Draft / B.G. valid up to two months after the guarantee period drawn in favor of the **paying officers** within 15 days of receipt of the work order. In the event of any breach or default in all or any conditions of the work order, the G.M., EHT (O&M) Circle, Bhubaneswar may forfeit the whole amount of Security deposit. No interest will be paid on the security amount deposited by the contractor and will be released after expiry of the guarantee period by the paying officer. The security value must be deposited prior to execution of work. In case the security amount is not deposited then the same shall be deducted from the payment bill. **The security amount not claimed within three years from the date of order shall be forfeited.**

**19. GSTIN REGISTRATION CERTIFICATE /I.T.PAN CARD/ LABOR/HT**

**CONTRACTOR LICENSE: -**

Clear attested Xerox copies of PAN No / **Civil (B/C Class) contractor license** / HT/EHT contractor license issued by Govt. of India/Govt. Of Odisha/Railways /Military, valid on the date of opening of tender should be submitted along with tenders without which tender will be rejected. The Contractor may be requested to produce original PAN card, GST registration certificate/ Civil (B/C-Class) contractor license /HT Electrical contractor license and all other relevant documents for verification. **Those who fail to produce the same and found not to be valid on the date of opening of tender, their tenders will be rejected. However the successful bidder have to produce the labour license before commencement of the work. All documents of the tender should be signed by the authorized signatory.**

Attested legible Xerox copies of Income Tax PAN Card, GSTIN Certificate & manufacturer/authorized dealership certificates valid on the date of opening of the tender should be submitted along with tenders without which tender will be rejected at the time of opening. If required, the tenders shall have to produce original documents for verification any time after the opening of tender. Those who fail to produce the same and found not to be valid on the date of opening of the tender, their tenders will be rejected.

**20. Terms of Payment.**

100% payment will be made against satisfactory execution of works subject to detailed verification and completion certificate produced by the concerned consignee.

**21. PAYING OFFICER & CONSIGNEE:**

**DGM (El.), EHT (O&M) Division, Khurda and DGM (El.), in charge of 132/33 KV Grid Sub-Station, Khurda shall be the Paying officer and Consignee respectively.**

**22. VALIDITY**:- Price with terms and conditions of the offer shall be valid for a minimum period of 180 days from the date of opening of tender failing which their tenders will be liable for rejection.

**23. Jurisdiction of the High Court of ODISHA.**

Suits, if any, arising out of this contract shall be filed by either Party in a court of Law to which the jurisdiction of High court of ODISHA extends.

**24. Correspondences.**

- i) Any notice to the supplier under the terms of the contract shall be served by Registered Post or by hand at the Supplier's Principal Place of Business.
- ii) Any notice to the Purchaser shall be served at the Purchaser's Principal Office in the same manner.

**25. Outright Rejection of Tenders**

Tenders shall be out rightly rejected if the followings are not complied with:

1. Tenders shall be accompanied with the prescribed **EMD**.
2. Tenders shall be kept valid for a minimum of 180 days from the date of opening of the tender.
3. Tenders shall be accompanied with clear valid Xerox copy of GST registration (if applicable), & clearance certificate, PAN card which must be valid on the date of opening of the tender. All copies of documents and each page of the tender must be signed by the authorized representative of the bidders.
4. Solvency certificates of not less than Fifty Lakhs, duly certified by CA/Bank Authorities.
5. Tenders shall be accompanied with Civil (B/C-Class) **Contract License** and **Electrical HT/EHT Contract License**.
6. Abstract of general terms and conditions of contract.
7. Bidders not fulfilling the qualifying criteria as mentioned in **ELIGIBILITY FOR SUBMISSION OF BIDS.**
8. The performance report of concerned Authority of OPTCL those bidders who have already executed the sanitation work during last three years in any part of OPTCL.
9. The bidders have to unconditionally comply with tender specification.

**Official Address of the Parties to the Contract**

The address of the parties to the contract shall be specified:-

**TENDERER:**      *GENERAL MANAGER (Elect)*  
*EHT (O&M) CIRCLE, BHUBANESWAR*  
*AT-Grid Sub-Station, Chandaka, PO-KIIT*  
*Bhubaneswar-751024*  
[Email-ehm.cle.bbs@optcl.co.in](mailto:Email-ehm.cle.bbs@optcl.co.in)

**BIDDER:**

Address : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone/Mobile No: \_\_\_\_\_

E-mail id: \_\_\_\_\_



**SECTION-III**  
**[LIST OF ANNEXURES]**

The following schedules and Proforma are annexed to this specification and contained in Section-III as referred to in the relevant clauses.

1	Schedule of Quantity	ANNEXURE-I
2	Declaration form	ANNEXURE-II
3	Abstract of terms and conditions to accompany Section-II of Part-I	ANNEXURE-III
4	REVERSE AUCTION PROCESS COMPLIANCE	ANNEXURE-IV

**ANNEXURE – I**

**SCHEDULE OF QUANTITY**

<b>Sl. No.</b>	<b>Description of Work</b>	<b>Unit</b>	<b>Quantity</b>
1	Cutting, Filling and Leveling of Sub-station area including supply of labour and T&P $\{[(58.5 \text{ m} + 39 \text{ m}) \times 1 \text{ m} \times 1.5 \text{ m}] + \{ (103+11.5) \times 1 \text{ m} \times 0.5 \text{ m}\} + (30 \text{ m} \times 20 \text{ m} \times 0.5 \text{ m}) = 146.25 + 57.25+300 = 503.5 \text{ Cum}$		
i	Soft/loose soil	Cum	503.50
2	Excavation and backfilling for foundation of equipment and column including supply of all materials, Labour and T& P and as per the instruction of Engineer In charge.		
i	For Fence Post = $128 \times 0.8 \text{ m} \times 0.4 \text{ m} \times 0.575 \text{ m}$	Cum	23.552
ii	For Brick Toe Wall = $\{[302 \text{ m} - (59 + 26.5)] \text{ m} \times 0.8 \text{ m} \times 0.4 \text{ m} \times 0.575 \text{ m}\}$	Cum	39.836
iii	For Pillars of 04 nos. Gate = $8 \text{ Nos.} \times 1.15 \text{ m} \times 1.15 \text{ m} \times 1.075 \text{ m}$	Cum	11.374
	<b>Total</b>	<b>Cum</b>	<b>74.762</b>
a	Hard/ Dense Soil (70% of Total)	Cum	52.333
b	Soft/Disintegrated Rock (Not requiring blasting) (30% of Total)	Cum	22.428

3	Disposal of surplus excavated earth (after backfilling) at site for distance of 100 meters. {80% of (503.5 + 74.762) Cum}	Per Cum / Mtr.	46260.960
5	FOUNDATION AND REINFORCEMENT:-Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering , supply of good quality 20 mm machine broken granite chips, good quality river sand and concreting, curing for foundation of columns, equipment structure, transformer and cable trench slab etc. as per IS:4156 including cost of taxes, royalties, lead lift, Labour and T&P With cost of cement and without steel.		
a	With ratio of concrete [1:3:6)		
i	For Fence Post = [178 x 0.5m x 0.5m x 0.075m]	Cum	3.338
	For Brick Toe Wall= [216.5m x 0.5m x 0.5 * 0.075m]	Cum	4.059
ii	Pillars of 04 nos. Gate = 8 Nos. x 1.15m x 1.15m x 0.075m	Cum	0.794
iii	PCC near 33 KV Bay Kiosk Area = [(15m x 10m) x (10m x 5m) x (5m x 5m)] x 0.1m]	Cum	22.500
	<b>Total</b>	<b>Cum</b>	<b>30.690</b>
b	With M-150 grade concrete in ratio [1:2:4)		
i	For Fence Post (1st Layer) = 128 Nos. x 0.4m x 0.325m x 0.3m	Cum	4.992
ii	For Fence Post (2nd Layer) = 128 Nos. x 0.4m x 0.25m x 0.55m	Cum	7.040
iii	C/R side (132 KV & 33 KV ) Fence post:(34+16)*0.4m*0.4m*0.5m)	Cum	4.000
iv	For Pillar Gate = 8 Nos. x 1.0m x 1.0m x 0.3m	Cum	2.400
v	For Pillar Gate = 8 Nos. x 0.4m x 0.4m x 2.85m	Cum	3.648
	<b>Total</b>	<b>Cum</b>	<b>22.080</b>
7	Breaking of existing retaining wall inside 33 KV & 132 KV S/Y with clearing of debris from switchyard as per the instruction of engineer in charge including supply of T&P labour etc necessary for the work (Retaining wall foundation = (34 + 16) X 0.4m X 0.4m X 0.5m )	Cum	4.000
8	Brick Masonary in ratio 1:5 with supply of First class K.B. Bricks, good quality river sand, Labour & T&P With supply of cement.		
i	Toe Wall (1st Layer) = [(216.5m - (128 x 0.4m)] x 0.325m x 0.3m	Cum	16.117

ii	Toe Wall (2nd Layer) = 165.3m x 0.250m x 0.550m	Cum	22.729
	<b>Total</b>	<b>Cum</b>	<b>38.846</b>
9	Cement Plastering with Mortar of 1:6 ratio with supply of all fine aggregates (good quality river sand), all labour and T&P with supply of cement.		
i	For Brick Toe Wall = [165.3m x 0.95m + (59m + 26.5m) x 0.9m]	Sqm	233.985
ii	For Gate Pillars = 8 Nos. x 4 Sides x 2.15m x 0.4m	Sqm	27.520
	<b>Total</b>	<b>Sqm</b>	<b>261.505</b>
10	Supply of GI Wiremesh Net (Hot dip ) 1" x 1" Square & 3 mm thick including cutting as per size & fitting on the erected GI angles (302m x 1.8m + 2% extra for wastage)	Sqm	554.472
11	Fabrication (Cutting of different size angles/Flats, drilling of holes) including cost of consumable, Labour, T&P and other ancillary item With cost of steel		
i	GI Angle of size 65 mm x 65 mm x 6 mm = 360 Nos. x 2.65m long each x 5.8 kg/metre length & 2% extra for lapping, wastage etc.	MT	5.644
ii	GI Angle of size 35 mm x 35 mm x 5 mm to be used in making frame of size 1.8 m x 1.8 m = 177 nos. gaps x 1.8 m each x 4 sides x 2.6 kg per metre length & 2% extra for lapping, wastage etc.	MT	3.380
iii	GI flat of size 35 mm x 5 mm for fixing of wiremesh net on opposite side = 246 nos. gaps x 2.5 m each x 4 sides x 1.6 kg per metre length & 2% extra for lapping, wastage etc.	MT	2.889
	<b>Total</b>	<b>MT</b>	<b>11.912</b>
12	Supply of 12mm x 20mm GI nuts & bolts required for fixing the frame to erected GI angle & wiremesh		
i	178 nos. frame x 16 nos. GI nuts & bolts per frame x 0.070 kg per nut & bolt	MT	0.199
13	Cutting, bending, binding, placing in position of Steel Rods for 4 nos switchyard gate column concreting with supply of Rod of all sizes (TATA/RINL/SAIL MAKE) including cost of binding wires,	MT	0.505
14	Fabrication (cutting of different size angles/Flats, drilling of holes) & fixing of 04 nos. Main gate (5.5m x1.8m) including supply of all required materials as per instruction of the Engineer in charge including cost of Steel.(Applying two coats of paint over primer)	MT	2.600

15	Earthing riser- Connection of diff size GI Flats (50x6 mm) from earth mat to Fence Post along with running earth flat at the control side of wire mesh), welding of diff size flats, application of two coats of bituminous Paint, wrapping of HT Tapes over it (With supply of Labour and T&P) using GI Flat of size 50x6 mm with supply of GI flat $\{(302/5 + 1)*2 + 59 + 26.5 + (2.5*18)\}$ & 2% extra for wastage.	Per Mtr.	258.37
16	<b>Pipe Earthing</b> : Pipe earthing including excavation of earth, treatment of bentonite compound, back filling with borrowed earth, termination to earth mat riser by nut bolting, apply of paint where necessary with supply of all Labour and T&P as per ISS-3043) with cost of earthing pipe (50 mm dia 3050 mm length medium gauge) and (50x6 mm) G.I.Flat.[Earth pits having at least 300mm(1 ft.) bored holes are to be filled up with only bentonite slurry requiring 50 kg of good quality bentonite as per O/o of CGM(O&M) vide letter no. 1657 dtd. 02.12.2016]	Per Set	18.00

MS Rod Requirement for Pillars of Gate								
Sl. No	Description as per the Schedule	Unit	Dia (mm)	No. of Pillar @ 2 nos. per Gate)	No. of Bar	Rod Length (mtr.)	Total Rod Requirement (metre or kg or MT)	Remarks
	Reinforcement Bar							
1	Pillars for Gate							
(a)	12 mm MS Rod	Mtr.	12	8	28	1.300	291.200	2 Layers & 2 Sides
		Mtr.	12	8	4	3.300	105.600	Vertical Rods
	Sub-Total(1)	Mtr.					396.800	
	Add 5% extra towards wastage	Mtr.					19.840	
	Total	Mtr.					416.640	
	Total (@0.888 kg per mtr. Length)	kg					369.976	
(b)	Pillars for Gate	Mtr.	10	8	20	1.300	208.000	Ring
	Sub-Total(2)	Mtr.					208.000	
	Add 5% extra towards wastage	Mtr.					10.400	
	Total	Mtr.					218.400	
	Total (@0.616 kg per mtr. Length)	kg					134.534	
	Grand Total (a + b)	kg					504.511	
	Grand Total	MT					<b>0.505</b>	



**ANNEXURE-III**

**ABSTRACT OF GENERAL TERMS AND CONDITIONS OF CONTRACT  
[COMMERCIAL] TO ACCOMPANY PART-I**

1(a)	Cost of Tender Document: D.D No & Date.	..... ..... .....
1(b)	EMD: DD No. & Date	----- ----- -----
1(c)	Tender Processing Fee: E-Challan No. & Date.	----- ----- -----
2	Attested copy of Pan card :-	<i>Furnished/Not Furnished</i>
3	Attested copy of valid labor Contractor License :-	<i>Furnished/Not Furnished</i>
	Attested copy of valid Civil (C/D-Class ) Contractor License :-	<i>Furnished/Not Furnished</i>
4	Attested copy of valid Electrical HT Contractor License :-	<i>Furnished/Not Furnished</i>
5	Attested copy of GSTIN certificate as applicable	<i>Yes/No</i>
6	Contractor's work experience including user's certificate furnished	<i>Yes/No</i>
7	<b>Manner of work:</b> - Whether agreeable to OPTCL's desired manner as indicated.	<i>Yes/No</i>
8	Whether agreeable to furnish Composite B.G. in case his tender be successful.	<i>Yes/No</i>
9	<b>Terms of payment:-</b> Whether agreeable to OPTCL's terms regarding payment.	<i>Yes/No.</i>
10	Nature of price:- FIRM	<i>Yes/No</i>
11	<b>Penalty:-</b> Whether agreeable to OPTCL's terms .	<i>Yes/No</i>
12	<b>Validity:</b> - Whether agreeable to OPTCL's terms	<i>Yes/No</i>
13	Whether declaration form duly filled in furnished.	<i>Yes/No.</i>
14	Whether scanned copy of required documents furnished.	<i>Yes/No.</i>
15	Whether scanned copy of Audited Accounts furnished	<i>Yes/No.</i>

Signature of the Bidder  
with seal of the company

**ANNEXURE-IV**

**Reverse Auction Process Compliance**

(To be incorporated in the bid document).

(To be submitted on letter head of the bidding company with sign and stamp and along with Technical bid)

To,

The **General Manager (Elect.)**,

EHT (O&M) Circle, OPTCL, Bhubaneswar.

Sub: Agreement to the Process related Terms & Conditions for e-Reverse Auction.

Dear Sir,

This letter is to confirm that:

- The undersigned is authorized representative of the company.
- We have studied the Commercial Terms and the Business rules governing the Reverse Auction as mentioned in your tender and confirm our agreement to that.
- We also confirm that we have gone through the auction manual and have understood the functionality of the same thoroughly.
- We, hereby, confirm that we will honour the Bids placed by us during the tendering/ e- Reverse auction process as called as e-RA.
- We also confirm that we will accept our Rank / Position that will be displayed when the Bidding Time for the Online Reverse Auction is over.

With regards, Signature with Designation with company seal