OPEN TENDER NOTIFICATION

FOR

Outline Agreement (OLA) of 03 years for Civil maintenance work at Kalyan & Panvel Circle at Tata Power Transmission, Mumbai

Tender Enquiry No: CC25SVP013

The Tata Power Company Limited (Tata Power)
Corporate Contracts,
Smart Center of Procurement Excellence,
2nd Floor, Sahar Receiving Station, Near Hotel Leela,
Sahar Airport Road, Andheri (E), Mumbai 400 059

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*** To be submitted in editable excel format**

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Section A: Tender Notice including Instruction to Bidders

1. Tender Details

1.1 Key Tender Specific Details

Reference Number	**CC25SVP013**
Description	**Outline Agreement (OLA) of 03 years for Civil maintenance work at Kalyan & Panvel Circle at Tata Power Transmission, Mumbai**
Type of Tender	**Open Tender**
Period	**OLA shall be valid for 03 years.**
Tender Fee	**INR 2,000/-**
Earnest Money Deposit (EMD)	**INR 60000/-** **Sixty Thousand Only/-** **PLEASE NOTE THAT IT IS MANDATORY TO SUBMIT EMD IN BANK GUARANTEE FORMAT ONLY**
Price Basis	**Outline Agreement**
Executive Handling this Tender*	Name: Ms. Sujata Patil Contact No.: 9561045413 E-Mail ID: sujatavishnu.patiltatapower.com

*You may contact the above personnel from Monday to Friday during office hours only.

***Interested parties are strongly advised not to wait by above time and purchase the tender immediately to get the link for bid submission. This will enable them to communicate/raise queries against the subject tender in time.**

Procedure for Participating in Tender. Following steps to be done before last date for purchase of tender,

1. Interested Vendors to refer to the Section C of the tender (Prequalification criteria).

2. Eligible and Interested Bidders to submit duly signed and stamped letter on Bidder's letter head indicating

a. Tender Enquiry number

b. Name of authorized person

c. Contact number

d. e-mail id

e. Details of submission of Tender Participation Fee

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2. Non-Refundable Tender Participation Fee, as indicated in table above, to be submitted in the form of Direct deposit in the following bank account and submit the receipt along with a covering letter clearly indicating the Tender Reference number –

Beneficiary Name – The Tata Power Co. Ltd.
Bank Name – HDFC Bank Ltd.
Branch Name – Fort Branch, Mumbai
Address – Maneckji Wadia Building, Nanik Motwani Marg, Fort, Mumbai 400023.
Branch Code – 60
Bank & Branch Code – 400240015
Account No – 00600110000763
Account type – CC
IFSC Code – HDFC0000060

E-mail with necessary attachment of 1 and 2 above to be send to sujatavishnu.patil@tatapower.com with copy to vivek.mittal@tatapower.com before "Last date and time for Payment of Tender Participation Fee"

Interested bidders to submit Tender Participation Fee and Authorization Letter before Last date and time as indicated above after which link from Tata Power E-Tender system (Ariba) will be shared for further communication and bid submission.

Please note all future correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc. will happen only through Tata Power E-Tender system (Ariba). User manual to guide the bidders to submit the bid through e-Tender system (Ariba) is also enclosed.

No e-mail or verbal correspondence will be responded. All communication will be done strictly with the bidder who have done the above steps (Payment of tender fee and submission of letter with requisite details) to participate in the Tender.

Also it may be strictly noted that once date of "Last date and time for Payment of Tender Participation Fee" is lapsed no Bidder will be sent link from Tata Power E-Tender System (Ariba). Without this link vendor will not be able to participate in the tender. Any last moment request to participate in tender will not be acknowledged.

Any payment of Tender Participation Fee by Bidder who have not done the pre-requisite within stipulated timeline will not be refunded.

Also all future corrigendum's to the subject tender, if any, will be informed on Tender section on website https://www.tatapower.com

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1.2 Calendar of Events

(a)	Payment of Tender Fee and Submission of letter nominating authorized person by Interested Bidder indicating their intent to Buy Tender.	Till 9th August 2024, Friday
(b)	Availability of Tender Documents	1st August 2024 onwards on Tender section of Tata Power website https://www.tatapower.com
(c)	Issuance of bid submission link through E-Tender system to authorized person of Vendors who have participated in tender (Following the steps mentioned in "**Procedure for Participating in Tender"** as mentioned above).	From 09/08/2024 to 22/08/2024
(d)	Date & Time of Pre-Bid Meeting (Online) & Site Visit	Shall be communicated separately through E-Tender event
(e)	Last Date of receipt of pre-bid queries, if any.	Shall be communicated separately through E-Tender event
(f)	Last Date of Posting Consolidated replies to all the pre-bid queries as received.	Shall be communicated with participating bidders through E-Tender event.
(g)	Last date and time of receipt of Bids.	22nd August 2024 up to 1500 Hrs.

**Note: - ***These dates and time are as planned and tentative. In case of change the same shall be intimated to Authorized Person of Interested Bidder through E-Tender System.

Please note post submission of Bids relevant communication will be done with Authorized Person of Interested Bidder through E-Tender System.

1.3 Mandatory documents required along with the Bid

1.3.1 Bid Guarantee Fee (EMD) of requisite value and validity. PLEASE NOTE THAT BID GUARANTEE ONLY IN FORM OF BANK GUARANTEE WILL BE ACCEPTED.

1.3.2 Requisite Documents to ascertain fulfilling of Technical and Commercial Pre-Qualification Requirement as detailed in Tender Enquiry.

1.3.3 Technical Submission including Drawings, Type Test details etc. as detailed in Technical Specification.

1.3.4 Required Commercial Submission as detailed in Tender Document

1.3.5 Technical and Commercial Clarification and Deviations as per the format attached in the Tender Enquiry

1.3.6 Proper authorization letter to sign the tender and participate in Tata Power E-Tender system on the behalf of bidder.

1.3.7 **For vendor not registered with Tata Power, Duly filled Vendor Registration form with all supporting documents is mandatory to participate in the Tender**.

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Please note that in absence of any of the above documents, the bid submitted by a bidder shall be liable for rejection.

Also please note that whenever editable format are shared it is requested that data be filled in relevant cells. No formatting or addition / deletion of rows / columns to be done. Wherever editable Excel submission are requested the file should be free from references, macros etc.

Checklist of Document Submission

Stage of Tendering	Document	Type of Format	Mode of submission
Before last date of Pre-Bid Query	Query / Clarification / Deviation (QCD) Format. (F1) Separate Excel sheet to be used for Technical and Commercial Pre-Bid Query	Editable Excel Format	Through message in E-tender system
Bid Submission Envelope 1 (First Part)	**Earnest Money Deposit**	**Original Bank Guarantee**	**In Sealed Envelope**
Bid Submission Envelope 2 (Second Part)	**Documents to be uploaded in Ariba only.** In case of multiple files, a zipped folder can be attached for the same (size limit of 100MB per zipped file)		
To be submitted Under Tab 2 in Ariba	Duly filled PQR and supporting documents		
	Duly filled PQR format	Editable Excel Format	E-Tender System
	Backup documents for Technical PQR	Signed and Scanned documents	E-Tender System
To be submitted in Ariba	Duly Filled Vendor Registration Form (for unregistered vendor) and supporting documents. Registered vendor to submit letter indicating **Vendor Code** in Tata Power and **factory/supply address** to be used.		
	Duly filled Vendor Registration Form (if	Signed and Scanned documents	E-Tender System

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	vendor is not registered with Tata Power)		
	Backup document for Vendor Registration Form (if vendor is not registered with Tata Power)	Signed and Scanned documents	E-Tender System
To be submitted under Tab 2 in Ariba	Technical Submission and Supporting Documents.		
	Duly filled Technical Submission Format	Editable Excel Format	E-Tender System
	Technical Submission as required for Technical Specifications	Signed and Scanned documents	E-Tender System
	Duly filled Technical Submission- Type test verification sheet Format	Editable Excel Format	E-Tender System
	Backup documents for Type Test verification	Signed and Scanned documents/ reports	E-Tender System
	Query / Clarification / Deviation (QCD) Format for Deviation if any	Editable Excel Format	E-Tender System
	Duly filled Unpriced Bid Format	Signed and scanned copy of document	E-Tender System
To be submitted under Tab 2 in Ariba	Commercial Submission and supporting document		
	Letter of Undertaking (FOR VENDORS NOT REGISTERED WITH TATA POWER)	Scanned Copy of letter of undertaking duly filled, stamped and signed	E-Tender System
	E-auction Undertaking form	Scanned Copy of letter of undertaking duly filled, stamped and signed	E-Tender System

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Bid Submission Envelope 3 (Third Part)	**Duly filled Priced Bid Format**	Duly signed and stamped scanned copy of document. To be entered in E-Tender System	E-Tender System

1.4 Deviation from Tender

Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the Query / Clarification / Deviation (QCD) Format. Deviations have to be mandatorily submitted in editable Excel sheet Technical and Commercial deviation have to be submitted separately.
Technical or Commercial Deviation should be mentioned in Deviation Format only. Deviation in any other document or Format will not be considered.

1.5 Right of Acceptance/Rejection

1.5.1 Bids are liable for rejection in absence of following: -
1.5.2 Mandatory Documents as listed in 1.3 above
1.5.3 Price Bid as per the Price Schedule mentioned in Tender Document
1.5.4 Receipt of Bid and Response to queries within the due date and time
Tata Power reserves the right to accept/reject any or all the bids without assigning any reason thereof.

1.6 Qualification Criteria

Qualification Requirement expectation and document are detailed in documents in Section C

1.7 Pre-Bid Queries

Pre-Bid Queries if any has to be sent through message in E-Tender System. Pre-Bid Query has to be sent only in the Query / Clarification / Deviation (QCD) Format. Technical Pre-Bid Query and Commercial Pre-Bid Query have to be submitted in Separate Editable Excel File in Prescribed Format. Pre-Bid Queries sent in any other format or send through any other communication channel will not be accepted and answered. Pre-Bid Query have to be sent in the stipulated timeline as defined in the Tender Document. No Pre-Bid Query will be accepted after the due time and date as specified as "Last Date of receipt of pre-bid queries, if any"

1.8 Marketing Integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the General Condition of Contracts and other parts of Tender Documents. Bidders must agree to these rules prior to participating. In addition to other remedies available, Tata Power reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the General Condition of Contracts or other part of the Tender Documents. A bidder who violates the marketplace rules or engages in behavior that disrupts the fair execution of the marketplace, may result in restriction of a bidder from further participation in the marketplace for a length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

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- Failure to honor prices submitted to the marketplace.
- Breach of terms as published in TENDER.
- Submit irrelevant documents or frequently cases of missing documents as part of compliance to Qualifying, Technical or Commercial Requirements causing unnecessary delay in Tender Evaluation.

1.9 Supplier Confidentiality

All information contained in this tender is confidential and shall not be disclosed, published or advertised in any manner without written authorization from Tata Power. This includes all bidding information submitted to Tata Power. All tender documents remain the property of Tata Power and all suppliers are required to return these documents to Tata Power upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

2. Evaluation Criteria

- The bids will be evaluated technically on the compliance to tender terms and conditions.
- The bids will be evaluated commercially on the overall all-inclusive lowest cost for the complete tender BOQ / each line item as calculated in Schedule of Items. Tata Power, however, reserves right to split the order line item wise and/or quantity wise among more than one Bidder. Hence all bidders are advised to quote their most competitive rates against each line item.
- Bidder must mandatorily quote against each item of Schedule of Items. Failing to do so, Tata Power may reject the bids.

NOTE: In case of a new bidder not registered with Tata Power, factory inspection and evaluation shall be carried out to ascertain bidder's manufacturing capability and quality procedures. However, Tata Power reserves the right to carry out factory inspection and evaluation for any bidder prior to technical qualification. In case a bidder is found as disqualified in the factory evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of Tata Power shall be final and binding on the bidder in this regard.

2.1 Price Variation Clause and Cap:

The prices shall remain firm during the entire contract period and no price variation is applicable.

3. Submission of Bid Documents

3.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document. Bids shall be submitted in 3 (three) parts:

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FIRST PART: "EMD – BANK GUARANTEE" of Value detailed in 1.1 valid for 180 days from the due date of bid submission in the form of Bank Guarantee favoring 'The Tata Power Company Limited'. The EMD must be strictly in the format as mentioned in Tender Document, failing which it shall not be accepted by Tata Power and the bid as submitted shall be liable for rejection.

Note: BG of 180 days validity and further claim period of 180 days is needed. In case the same cannot be issued by your bank then BG valid for 365 days can be provided.

Note: At times bidders have sought Tata Power bank details which is needed by them to make BG. Hence the same is reproduced below. These details are only provided to facilitate making of BG if needed

Tata Power's Bank Details for submitting EMD BG:
Bank Name & Address – ICICI Bank, 163 HT Marg,
Backbay Reclamation, Churchgate, Mumbai 400 020.
A/c no. - 000451000293
IFSC Code - ICIC0000393

The hard copy of EMD in a sealed envelope should be sent on address mentioned in Tender document.

First Part must be submitted in Sealed Envelope.

SECOND PART: "TECHNICAL / UN-PRICED COMMERCIAL BID" shall contain the following documents:

a) Documentary evidence in support of Technical, Commercial qualifying criteria.
b) Technical literature/GTP/Type test report/Details of Qualified Manpower Available/ Testing Facility available etc. *(complete in all respect as desired and detailed in Technical Specification and Technical Requirement Section)*.
c) Duly filled Technical and Commercial Deviation Sheets.
d) Duly filled formats like Authorization affidavit form.
e) *Unpriced Commercial Bid.*

The technical / un-priced commercial bid shall be properly indexed and is to be submitted in Soft Copy though E-Tender system of Tata Power. Hard Copy of Technical Bids need not be submitted.

Second Part must be submitted through E-Tender System Only.

THIRD PART: "PRICE BID" shall contain only the price details and strictly in Price Bid format along with explicit break up of basic prices and applicable GST. Basic price should include packaging forwarding, freight, transit insurance and any other cost envisaged by the bidder.

Third part must be submitted through E-Tender System Only.

FOR BIDS INVITED THROUGH E-TENDER SYSTEM (TECHNICAL, UN-PRICED COMMERCIAL AND PRICE BIDS):

In response to advertisement Bidder has to provide details of person authorized to Bid on behalf of the Bidder. An e-mail will be generated by E-Tender System and the authorized person can download the Tender Documents from the system.
SECOND and THIRD PART of the Bid have to be submitted in E-Tender System.

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Bidders have to mandatorily submit SECOND & THIRD PART (Technical, Un-priced commercial and Price Bids) only through E-Tender system of Tata Power. Bids submitted through any other form / route shall not be admissible.

FOR BIDS INVITED IN SEALED ENVEOPE PROCESS (FIRST PART):

First part of the bid shall be in sealed envelope which shall be clearly marked as below:

EMD BID –
"Please mention Tender Reference No"

Please mention our Tender Reference No on the Tender and drop the same in our Tender Box located at The Tata Power Company Limited (Tata Power), Corporate Contracts, Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station, Near Hotel Leela, Sahar Airport Road, Andheri (E), Mumbai 400 059.

The outer envelope shall be addressed to:

Head - Procurement
The Tata Power Company Limited (Tata Power),
Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station,
Near Hotel Leela, Sahar Airport Road, Andheri (E), Mumbai 400 059.

The outer envelope shall also bear the Name and Address of the Bidder along with our Tender No. and subject.

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and Tata Power, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to Tata Power to collect the proposals from Courier/Airlines/Cargo Agents etc. shall be entertained.

SIGNING OF BID DOCUMENTS:

The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

The Bid being submitted must be signed by a person holding a Power of Attorney authorizing him to do so, certified copies of which shall be enclosed.

The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.

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A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.

3.2 Contact Information

Communication Details: Detailed in 1.1

3.3 Bid Prices

Bidders shall quote for the entire Scope of Supply / work with a breakup of prices for individual items and Taxes & duties. The bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total price with taxes, duties & freight up to destination at various sites of Tata Power. The all-inclusive prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during the execution of the supply work, breakup of price constituents.

The quantity breakup shown else-where other than Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule, but which are required to complete the job as per the Technical Specifications / Scope of Work / SLA mentioned in the tender, shall be deemed to be included in prices quoted.

3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only. It also may be noted that the denomination of Purchase Order / Outline Agreement / Rate Contract and associated Payment to Successful Bidder shall also be in Indian Rupees Only. In case Bidder intends to import any equipment, part etc. and supply to Tata Power then all liability and costs related to import will rest with the Bidder. All statutory compliances, payments, expenditure etc. related to importing of equipment will be responsibility of the bidder.

3.5 Period of Validity of Bids

Bids shall remain valid for **180 days** from the due date of submission of the bid.

Price submitted as part of e-Auction / Negotiation shall remain valid for **90 days** from date of E-auction / Negotiation.

Notwithstanding clause above, Tata Power may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses thereto shall be made in writing.

3.6 Alternative Bids

Bidders shall submit Bids, which comply with the Bidding documents. Alternative bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the bidding documents.

3.7 Modifications and Withdrawal of Bids

The bidder is not allowed to modify or withdraw its bid after the Bid's submission. The EMD as submitted along with the bid shall be liable for forfeiture in such event.

3.8 Earnest Money Deposit (EMD)

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The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender. The EMD is required to protect the Tata Power against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be in following form:

- Bank Guarantee valid for 180 days after due date of submission.

The EMD shall be forfeited in case of:

a) The bidder withdraws its bid during the period of specified bid validity.

Or

b) In case of a successful bidder, if the Bidder, within 15 days, does not
i) accept the purchase order, or
ii) furnish the required Contract Performance Bank Guarantee (CPBG)

Original Bank Guarantee submitted as EMD shall be returned only after completion of award process for unsuccessful bidders and issue of Contract Performance Bank Guarantee (CPBG) for successful bidder.

4. Bid Opening & Evaluation process

4.1 Process to be confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence Tata Powers processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

4.2 Technical Bid Opening

Bids will be opened at Corporate Office of Tata Power as per our standard Process. The bids shall be opened internally by Tata Power. Technical bid must not contain any cost information whatsoever.

First, envelope marked "EMD" will be opened. Bids without EMD of required amount/ validity in prescribed format, shall be rejected.

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened in E-Tender system.

4.3 Preliminary Examination of Bids/Responsiveness

Tata Power will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order. Tata Power may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

Prior to the detailed evaluation, Tata Power will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

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Bid determined as not substantially responsive will be rejected by the Tata Power and/or the Tata Power and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

4.4 Techno Commercial Clarifications

Bidders need to ensure that the bids submitted by them are complete in all respects. To assist in the examination, evaluation and comparison of Bids, Tata Power may, at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to the Tata Power specifications and attempt will be made to bring all bids on a common footing. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted owing to any clarifications sought by Tata Power.

4.5 Price Bid Opening

The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of Tata Power without any further correspondence in this regard.

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

4.6 Reverse Auction and Price Matching Option

Tata Power reserves the right to conduct the reverse auction AND / OR Manual Negotiations for the products/ services being asked for in the tender. Only Technical Qualified Bids will be allowed to participate in e-auction. Date and time of e-auction will be intimated through E-Tender system to Authorized Person of Interested Bidder.

For case where more than one bidder has to be awarded (including Rate Contract / Outline Agreement) Price Matching Option will be exercised. Volume of job allocated to original competitive bidder will be more than bidder who is chosen through Price Matching Option. Tata Power decision regarding work sharing shall be final and no explanation OR clarification shall be given regarding the same.

Tata Power reserves the right to go for Reverse Auction (RA) for price negotiation and discover the most competitive price on ARIBA portal, Tata Power's official e-tendering platform. This will be decided after techno-commercial evaluation of the bids. Bidders need to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case Tata Power decides to go for RA.

Only those bidders who are techno-commercially qualified shall be eligible to participate further in RA process. However, the original H1 bidder (whose price bid is the highest post techno-commercial evaluation) shall not be allowed to participate in further RA process provided minimum three techno-commercially qualified bids are available.

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5.0 Award Decision

Tata Power will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 2.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Priced Bid Format subject to any corrections required in line with Clause 4.3 above. The decision to place purchase order/Outline Agreement/ Rate Contact solely depends on Tata Power on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Tata Power may deem relevant.

Tata Power reserves all the rights to award the contract to one or more bidders so as to meet the delivery requirement or nullify the award decision without assigning any reason thereof.

In case any supplier is found unsatisfactory during the delivery process, the award will be cancelled, and Tata Power reserves the right to award other suppliers who are found fit.

5.1 Rate Contract / Outline Agreement

Rate Contract / Outline Agreement does not guarantee any assured business volume in Rupees or Quantity. Quantities are only indicative and specified for the purpose of readiness as per the request from Purchaser. Supplies shall be only against Firm Purchase Orders placed as per the agreed terms and conditions of Rate Contract / Outline Agreement. Purchaser shall be entitled at its discretion to place firm order for such supplies on "As and When Required Basis" without minimum take-off guarantee.
Rate Contract / Outline Agreement will have list of Items with Unit Rate and applicable Taxes and Duties. There will be a cap on value for which order which can be placed against the Rate Contract / Outline Agreement. Actual quantity ordered for each line item may differ significantly from the tentative quantity indicated in the Tender Document. One / few / all items of Rate Contract / Outline Agreement can be ordered till the Cap Value is reached.

6.0 Order of Preference / Contradiction:

In case of contradiction in any part of various documents in tender, following shall prevail in order of preference:

1. Outline Agreement/Purchase Order (with Commercial conditions)
2. Special Terms and conditions (if applicable)
3. General Terms and conditions
4. Technical Specifications

In case there is a discrepancy in the BOQ mentioned in tender (to the extent modified through subsequent Corrigendum, if any) and the bid submitted by any bidder, the description as mentioned in the tender (to the extent modified through subsequent Corrigendum, if any) shall prevail.

7.0 Ethics

Tata Power is an ethical organization and as a policy Tata Power lays emphasis on ethical practices across its entire domain. Bidder should ensure that they should abide by all the ethical norms and in no form either directly or indirectly be involved in unethical practice.

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Tata Power work practices are governed by the Tata Code of Conduct. Bidder is requested to refer Tata Code of Conduct Clause in General Terms and Conditions.

8.0 General Condition of Contract and Special Condition of Contracts

Any condition not mentioned above shall be applicable as per General Terms and Conditions and Special Condition of Contracts attached along with this tender.

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Section B: Format of Technical & Commercial Pre bid Queries

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FORMAT B.1
Format for Technical Pre-Bid Queries
Tender No
Package Name
Bidder :

Note : The said format to be used only for Technical Pre-Bid Query. Any Commercial Query has to be strictly in Format B2 Format for Commercial Pre-Bid Query and sent seperately
Format to be used for query regarding Technical Pre-Qualifcation Requirement, Safety Pre-Qualifcation Requirement, Technical Set of Documnt
Pre-Bid Query has to be sent in editable Excel file fomat only
Pre-Bid Query has to be sent through e-mail in Tata Power E-Tender System

Sr. No.	Detailed Reference to Tata Power Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	Tata Power Response
1	2	3	4	5

FORMAT B.2
Format for Commercial Pre-Bid Queries
Tender No
Package Name
Bidder :

Note : The said format to be used only for Commercial Pre-Bid Query. Any Technical Query has to be strictly in Format B1 Format for Technicall Pre-Bid Query and sent seperately
Format to be used for query regarding Tender Notice, Commercial Pre-Qualifcation Requirement, Terms and Conditions, Other Formats / templates
Pre-Bid Query has to be sent in editable Excel file fomat only
Pre-Bid Query has to be sent through e-mail in Tata Power E-Tender System

Sr. No.	Detailed Reference to Tata Power Tender Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	Tata Power Response
1	2	3	4	5

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Section C.1: Pre-Qualification requirement

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FORMAT C.1					
Technical Pre-Qualification Requirement and Submission Format					
Tender No					
Package Name		**OLA of 03 years for Civil maintenance work at Kalyan & Panvel Circle at Tata Power Transmission, Mumbai**			
Bidder :					
Note :	Vendor Submission / claim without suitable backup document will not be accepted and Bid is Liable for Rejection				
	This format duly filled in editable Excel format has to be uploaded as Bid Submission with all relevant Backup Document				
Package Description: The scope of the work consists of asset management of Transmission Divisions at Kalyan Circle (Kalyan Node & Panvel Node). Routine / emergency / break down services are being requested by internal customers of Tata Power. Civil maintenance works viz. repairs to structures, Maintenance, pipelines, plumbing & Carpentry works etc. along with construction of structures of building, switchyard, is required to be carried out. These works are either planned in nature or unplanned due to emergent requirements as per need of plant.					
Tender Reference No - CC25SVP013					
Pre - Qualification Requirement (PQR) - Please note that the PQR is for information only and the documentary evidence to ascertain meeting of the requirement has to be submitted along with the bid and not along with the tender fee					
				To be filled up be Vendor	
Sr No	Parameter	Tata Power Requirement	Documents to be submitted by vendor to ascertain meeting of Pre-Qualification Requirement	Vendor Submission against Tata Power PQR Requirement	Documents submitted by Vendor to ascertain meeting of Pre-Qualifcation Requirement
1	**2**	**3**	**4**	**5**	**6**
(A)	**Experience**	Bidder along with selected sub vendors should have minimum 05 years' experience of civil works such as Civil maintenance works, RCC Repair works, Concreting works, structural steel work, Plumbing & Carpentry works. Selected sub vendors (if any) will be subject to approval of Tata Power.	Bidder to submit credentials/ documents for supporting the noted criteria. Owner has the right to reject the bid in case it is observed that the Bidder does not meet the relevant experience for the subject works		
		Bidder must have experience of successfully completing a minimum of following civil works during the past 5 years as on the date of bid opening. • 100 cubic meters of RCC works. • Structural Steel works of 50 MT In case the bidder has a previous association with any of Tata Power Group companies for similar products and services, the performance feedback of the bidder by the Tata Power Group companies shall only be considered for evaluation purpose, irrespective of performance certificates issued by any third organization.			
(B)	**ISO Certifications**	ISO Certifications: Vendor should possess ISO-9001, ISO-14001 and OHSAS-18001 / ISO- 45001 Certification or they should provide an undertaking that they will obtain these certifications for their Organization if the work is awarded to them.	Bidder to submit credentials for supporting the noted criteria. Owner has the right to reject the bid in case it is observed that the Bidder does not meet the relevant experience for the subject works.		
(C)	**Commercial Capability**	Avrage Annual Turnover for last 3 years shall not be less than 50 Lakh.	Profit and Loss Statements, Balance Sheet, Cash Flow Statements for the Three (3) preceding financial years duly audited and		

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Section C.2: Safety Bid Format

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Safety Bid Document

If the job is ''High Risk " or “High Value " or " Long duration” then Tata Power Corporate Contracts Department will attach following documents along with the Request for Quotation (RFQ):

1) Tata Power Safety Terms and Conditions (attached Separately)
2) Tata Power CSM- F7-Safety Competency Form
3) Tata Power CSM-F8-PPE Requirements

If the job is not coming under "High Risk /High value /Long duration” than the RFQ will be contain only "Tata Power Safety Terms and Conditions"

CSM-F7-Safety Competency Form

Name of the Vendor/Bidder :-

Name of the Sub Vendor **(If job is given to Sub Vendor)** **:-**

Description of the Job :-

Request for Quotation (RFQ) No. :-

Vendor/Bidder to mandatorily provide the below safety competency related information.

1. **Proposed Manpower Deployment Schedule** :-

Category of Manpower Deployed	Minimum Qualification & Experience	Proposed Numbers against each category month-wise			
		Month 1	Month 2	…	Month n
Project Manager					
Site-In-Charge (Site Manager)					
Shift-in-Charge					
Safety Officers					
Supervisors					
Technicians					
a……					
b……					
Highly Skilled Workmen					
a……					
b……					
Skilled Workmen					
Semi-Skilled Workmen					
Unskilled Workmen					
Total Manpower					

Instructions to Bidder to fill:

1. Bidder to provide the overall site manpower deployment schedule as above.
2. Bidder to indicate (through colour code mentioned below) their direct and sub-contracted employees

Direct bidder employee
Partly Direct / Partly sub-contracted
Sub-Contracted

3. Against each of the category, bidder to indicate the minimum qualification and experience of the proposed manpower.
4. Rows can be added to also identify other specialised manpower e.g. specific details to be included for high risk activities operators
5. Columns can be extended to the actual duration of Site activities.
6. Bidder to note that if operations is in shifts, then Shift-in-charge / safety officers are required for each shift of operation.

2. List of Tools ,Tackles & Equipments :-

Bidder/Vendor to provide the list of tools, tackles, equipments to be used during the job/ project execution. Bidder/Vendor to ensure that all the lifting tools and tackles, pressure vessels are duly certified by the competent person authorised by the Chief Inspector of Factories of the respective state prior to start of the job

Sr. No.	Description of Tools / Tackles	Capacity / Rating	Quantity	Make	Remarks
1					
2					
3					
4					
5					
6					
7					
...					

3. Safety Records:

Bidder to provide the details of fatalities and lost work day cases (LWDC) which may happened during the last three years (data to be provided for the last completed year and preceding 2 years).

Description	Safety Data for Last 3 Years		
	Year 1	Year 2	Year 3
	20__ - __	20__ - __	20__ - __
Fatalities (Nos.)			
Lost Work Day Cases (Nos.)			

In case of no fatalities, LWDC during any year, the form may be filled stating NIL against the respective year. Bidders are encouraged to also submit the RCA / incident investigation reports and the learning's implemented out of the above reported incidents

4. Job Safety Plan/ Method Statement:

Bidder to provide / enclose a detailed Site/Job Safety Plan along with a Method statement detailing the execution philosophy (how the bidder intends to execute the Job/Project), identifying all key activities which are required to be performed by the contractor at Site. Bidder to also list down all high risk activities and provide the Hazard Identification and Risk Assessment (HIRA) for all such high risk activities involved in the site work.

5. Accreditations:

Sr.	Certification	Yes / No	If Yes, Year of Certification	If No, Planned date for Certification
1.	ISO 9001			
2.	ISO 14001			
3.	OSHAS 18001			
4.	Any other (please specify…….)			
Note: Please attach certificates to support above. In case not accredited for above but applied for, application letters may be attached.				

CSM-F8-PPE Requirements

The Bidder/Vendor shall ensure that the following PPE of Approved standards shall be available at all time and shall be used by his employees with no exception whatsoever.

1	All contractor's employees at site	Safety Florescent Jacket (orange colour), Safety helmet & safety shoes with steel toe cap
2	Workers mixing asphalt , cement , lime / concrete	Safety goggle & protective Hand gloves and footwear, Nose mask.
3	Welders / Grinders	Welding screen/goggles , safety shoes, leather hand gloves, aprons , leg guard
4	Stone breaker	Protective goggle, hearing protection, anti vibration hand gloves and Protective clothing.
5	Electricians	Rubber hand gloves & Electrical resistant shoes.
6	Workers engaged in insulation using glass wool etc.	Respiratory mask & leather Hand gloves, goggles.
7	Workers engaged in coal handling plant, ash handling plant and working in high dust area.	Dust mask, Hand gloves, protective goggles.
8	Workers working at a height of 1.8 Meter or above.	Double lanyard full body harness, Fall arrestor and safety net made of reinforced nylon fiber ropes firmly supported with steel structures

• PPE shall be conforming to BIS/DGMS/DIN specifications, in good condition and shall be comfortable to his employees, when used.

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Section D.1: General Conditions of Contract

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Appendix I -

a) ESG framework for Contractor/ Business Associates &
b) Supplier/ Contractor code of conduct.

Appendix II - Safety T & C, Tata Power policies and TATA Code of Conduct.

1. DEFINITION OF TERMS AND PRELIMINARY CONDITION OF CONTRACT

1.1 Definitions: In the Contract (as defined below), unless the context requires otherwise the words and expressions defined below shall have the meaning hereinafter assigned to them.

1.1.1 "Affiliate" shall mean an entity controlling, controlled by, or under the common control with, a Party directly or indirectly through ownership of voting securities or by Contract or otherwise

1.1.2 "Annexure" means all appendices, annexure and schedules annexed to this Contract or incorporated by reference herein and shall include all amendments and revisions thereto made by mutual agreement of Owner/Project Manager and Contractor in accordance with the provisions contained in this behalf in this Contract.

1.1.3 Not Used

1.1.4 "Applicable Laws" means all laws, treaties, ordinances, rules, regulations applicable in India and amendments, re-enactments, revisions, applications, and adaptations thereto made from time to time and in force and effect, judgements, decrees, injunctions, writs and orders of any court, arbitrator or governmental agency or authority, rules, regulations, orders and interpretations of any Governmental Instrumentality, court or statutory or other body having jurisdiction over construction of the Facility on the Facility Site, performance of the Work or supply of Goods, including Applicable Permits, as may be in effect at the time of performance of work or supply of Goods hereunder by the Contractor, which time would include Defects liability period as appropriate, provided, however, that if at any time the Applicable Laws are less stringent than the standards set forth in the Contract hereto, the standard set forth in the contract hereto shall be deemed to be the standards under Applicable Laws.

1.1.5 "Applicable Permits & Clearances" means any and all Permits, Clearances, authorizations, consents, licenses (including without limitation any import or export licenses), lease, ruling, exemption, filing, agreements, or approvals, required to be obtained or maintained in connection with construction of the Works on the Site, performance of Work, respectively by the Contractor and the Owner/Project Manager in accordance with the Contract and their maintenance, as may be in effect at the time of Contractor's performance of Work or supply of Goods hereunder.

1.1.6 "Bid" means the offer of the Contractor to the Owner/Project Manger in response to the Tender Document as set forth in the Final Proposal.

1.1.7 "Business Day" means a day other than a Sunday or public holiday on which banks are open for domestic business in the city/area where project site is located.

1.1.8 "Cause" in relation to the revocation or amendment of any Permit means any fact or circumstance, including without limitation any default, neglect or failure to abide by any of the terms and conditions of such Permit.

1.1.9 "Change in Law" means the occurrence of any of the following after the Effective Date of this Agreement.

a) The enactment of any or issuance of any new Indian law that becomes applicable law

b) The amendment or repeal, or re-enactment of any existing Applicable law

c) A change in the interpretation or application or enforcement of any Applicable Law by Government instrumentality

d) The revocation or cancellation of any Applicable Permit unless due to a cause attributable to the Contractor.

1.1.10 "Change Order" means a written order from the Owner/Project Manager to the Contractor after the Effective Date of the Contract requiring a change in any part of the Work or supply of Goods that may involve

a) A change in the Scope of Work or supply of Goods,

b) An additional Work or supply of Goods,

c) The omission of a portion of the Work or supply of Goods or

d) If appropriate, an adjustment in one or more of the (i) Contract Prices, (ii) Completion Dates, (iii) Milestone Payment Schedule, (iv) any of the Performance Guarantees, or (v) any provision of this Contract including any Annexure or Schedule hereto or

e) Any of the above in combination.

1.1.11 "Change Order Notice" means a written proposal issued and signed by Owner/Project Manager requesting a change, submitted to Contractor by Owner/Project Manager.

1.1.12 "Change Order Request" means a written notice to Owner/Project Manager issued by Contractor indicating that a change order is required in connection with the performance of the work or supply of goods.

1.1.13 "Commissioning" shall mean integrated activity covered under "Preliminary Operation", "Initial Operation", "Trial Operation" and carrying out "Tests before Taking-Over" of Relevant Package under the Contract.

1.1.14 "Contract" means the documents as set out in the form of Contract Agreement in relation to the Works between the Parties as may be amended, supplemented or modified from time to time by agreement in Writing between the Parties.

1.1.15 "Control" (including, with its correlative meanings, the term "under common Control with" or "Controlled by"), as used with respect to any person, means possession, directly or indirectly, of the power to direct or cause the direction of management or policies of any Person, whether through the ownership of voting securities, or partnership or other ownership interests, or by

contract or otherwise; it being clarified that the ownership of 26% of the voting securities of a Person, or the ability to appoint a majority of the members of the board of directors or other governing body of such Person, shall be deemed to be "Control" over such Person.

1.1.16 "Contract Period" or "Period of Contract" or "Contract duration" means the period from the Effective date up to and including the last day of the Defect Liability Period.

1.1.17 "Contract Price" or "Contract Value" or "Contract Sum" means the lump sum fixed price or unit rates of items as stated in the Contract or such price as may be modified and as payable by the Owner/Project Manager to the Contractor in consideration of it performing the Works or supply of Goods including all obligations of the Contractor under and in accordance with the provisions of the Contract.

1.1.18 "Contractor's Works" shall mean the places which are used by the Contractor or any of its sub-vendor / Sub-Contractor for the manufacture of equipment or fabrication of materials for the performance of Work.

1.1.19 "Contractor's Equipment" means all machinery, apparatus, equipment, appliances, Materials, items and other things (other than temporary Works) of whatsoever nature required for the execution and completion of the Works, performance of the Contractor's obligations under the Contract including supply of Goods and Work, establishing of Performance Guarantees, and the remedying of any defects and deficiencies, but does not include equipment, apparatus, appliances, machinery, Materials, items and other things of whatsoever nature intended to form or forming part of the Works.

1.1.20 "Contractor" means the Person whose Bid has been accepted by the Owner/Project Manager and is awarded the Works under this Contract, and the legal successors in title to such person who satisfies the qualification criteria set forth in the Tender Documents.

1.1.21 "Contractor Permits" means all Permits, required by the Contractor from any Government Instrumentality for the performance of his obligations.

1.1.22 "Contractor's Representative" means the person named as such in the Contract or other person appointed and from time to time communicated to the Owner/Project Manager by the Contractor in his place in accordance with the terms of the Contract.

1.1.23 "Completion of Works" shall mean successful completion of all Works including Performance Tests and of 'Tests Before Taking Over' and issuance of Final Taking Over Certificate/completion certificate by the Owner/Project Manager.

1.1.24 Not Used.

1.1.25 "Consultant" shall mean Consulting Engineers appointed by the Owner/Project Manager for the Project and shall include, their duly authorised representatives.

1.1.26 "Day" means a calendar Day of 24 (twenty four) hours and "Year" means 365 (three hundred and sixty five) days.

1.1.27 "Documents" means and includes all design documents, engineering documents, Drawings, calculations, computer software (programs), computer media, samples, patterns, models, construction documents, erection documents, Operation and Maintenance Manuals, and other manuals, and the like as well as, all other data and information to be submitted by the Contractor and shall include without limitation, engineering, design and construction drawings, data sheets, specifications, plans, bills of Materials and estimates.

1.1.28 "Drawings" shall mean all:

a) Drawings furnished by the Owner/Project Manger or the Consultant.

b) Supplementary drawings furnished by the Owner/Project Manger or the Consultant to clarify and to define in greater detail the intent of the Contract.

c) Drawings submitted by the Contractor with his proposal provided such drawings are acceptable to the Owner/Project Manger or the Consultant.

d) Engineering data and drawings submitted by the Contractor during the progress of the Work under the Contract, provided such engineering data and drawings are acceptable to the Consultant or the Owner/Project Manager.

1.1.29 "Effective Date" or "Effective Date of Contract" or "Date of award" means the date on which the Contract comes into force and effect, i.e. the date of issue by the Owner/Project Manager of the Letter of Intent or Notice to Proceed or as defined in the Contract Agreement.

1.1.30 "Facility" or "Plant" means, collectively, the Relevant Package and other apparatus, appliances, machinery, equipment, components and other Works, together with all auxiliaries, Materials, apparatus, appliances others things whatsoever and related buildings as an integrated whole, including without limitation all systems and sub-systems thereof and related facilities, including without limitation any and all appliances, parts, instruments, appurtenances, accessories and other property that may be incorporated or installed in or attached to or otherwise become part of the Plant or as envisaged in the Contract or which otherwise constitutes a part of the Facility and located on Site.

1.1.31 "Final Take over" means the acceptance by the Owner/Project Manager of the Works as a whole in accordance with Contract.

1.1.32 "Final Payment Certificate" means the payment certificate issued by the Owner/Project Manager or his Representative thereof to the Contractor.

1.1.33 "Financing Document" means any document relating to the: Debt or equity financing to the Owner/Project Manager for provision of funds for the development, Design, construction and

/or operation of the Plant; or funds for refinancing part or whole or take-out of any such financing.

1.1.34 "Force Majeure Event" shall have the meaning set forth in clause no. 13.0 of these Conditions of the Contract.

1.1.35 "Foreign Currency" means a freely convertible currency, specified in the Schedule of Prices mentioned elsewhere in Contract in which part of the Contract Price is payable, but not Indian Rupees.

1.1.36 "General Conditions of Contract" means these 'Terms and General Conditions of Contract' as mutually agreed as part of Contract.

1.1.37 "Goods" means all of the materials, equipments, machinery, apparatus, appliances, components and/or other Materials and things, which the Contractor is required to supply to the Owner/Project Manager under the Contract.

1.1.38 "Good Engineering Practices" means those practices, methods, acts, techniques and standards as may be followed or employed in the performance of the Work or supply of Goods and discharge of its obligations by the Contractor and which (i) are generally accepted internationally for use in the Construction and electric utility industry, taking into account conditions in India, in connection with the works of the same or similar size and type as the Relevant Package, (ii) are commonly used in prudent engineering, construction, project management and operations, and (iii) would be expected to result in performance of the Services and completion of Works in a manner consistent with Applicable Laws, Applicable permits, reliability and safety.

1.1.39 "Government Instrumentality" or "Government" means the Government of India, the Government of State and any other State, or any political subdivision, ministry, department, agency, corporation, commission or any regional, local or municipal authority or governmental body thereof or any other governmental or statutory body under the direct or indirect control of the Government of India or Government of State or of any other State, or of any political subdivision, ministry, department, agency, corporation, commission, or any regional, local or municipal authority or governmental body thereof, and shall include without limitation any other governmental or statutory body having jurisdiction over the facility or over the performance of any part of Work or the Works or any obligation of the Contractor or the Owner/Project Manager under the Contract.

1.1.40 "Guaranteed Completion Date" or "Guaranteed Completion Dates" means, individually or collectively, the Completion Date of the Works.

1.1.41 "Hazardous Materials" means (i) hazardous materials, hazardous wastes, hazardous substances, toxic substances or contaminants as those terms are defined under any environmental law or regulation, including, but not limited to, Applicable Laws, and in the regulations adopted or promulgated pursuant thereto; (ii) petroleum and petroleum products including crude oil and any fractions thereof; (iii) any other hazardous, radioactive, toxic or noxious substance, material,

pollutant, or solid, liquid or gaseous waste; and (iv) any substance that, whether by its nature or its use, is subject to regulation under any environmental law or with respect to which any applicable environmental law or any Governmental Instrumentality requires environmental investigation, monitoring or remediation.

1.1.42 "Inspector" shall mean the authorised representatives appointed by the Owner or Project Manager or the Consultant or Owner's/Project Manager's Third Party Inspection Agency for purpose of the inspection of materials / Equipment / works / Services.

1.1.43 "Intellectual Property" means copyrights conferred under statute, common law or equity in relation to inventions (including patents) registered and unregistered trademarks and service marks registered and unregistered designs, circuit layouts, confidential information, proprietary information and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields."

1.1.44 "Interim Payment Certificate" means any payment certificate other than Final Payment Certificate, issued by the Owner/Project Manager.

1.1.45 "Latent Defect" shall be the defects inherently lying within the goods or Works which do not manifest during normal inspections carried out by the Owner/Project Manager during Defect liability Period.

1.1.46 "Liquidated Damages" means the appropriate measures of the damages for such delays or such shortfalls in performance by the Contractor and are neither penalty nor consequential damages sustained by Owner/Project Manager as a result of such delays and / or shortfalls, as set forth in relevant clause hereof.

1.1.47 "Manuals" means all the various instruction manuals to be provided as per the Contract by the Contractor and shall include Manuals described in Specifications or General Conditions of Contract.

1.1.48 "Manufacturer" means any entity or firm who is the producer and furnisher to the Contractor of any material or designer and fabricator of any equipment / systems which is to be incorporated in or forms part of the Plant / work.

1.1.49 "Materials" means Goods and other things of all kinds to be provided and incorporated, to be used in the permanent Works / Plant/ Works by the Contractor, including Goods purchased by the Owner/Project Manager and supplied to the Contractor or as a free issue or the supply-only items (if any) which are to be supplied by the Contractor under the Contract.

1.1.50 "Milestone Payment Schedule" means the document which sets forth the limits of payments to be released (worked out, inter alia, on the basis of payment terms agreed by the Owner/Project Manager) by linking such payment limits (in terms of percentages) with detailed milestones commencing from the Effective date. Such percentages shall be with reference to the Contract Price.

1.1.51 "Month" shall mean calendar month or a period of 30 (thirty) days as relevant to the context.

1.1.52 "Monthly Progress Report" or "Progress Report" means a progress report of the Works meeting the requirements set forth in Specification hereto or as instructed by the Owner/Project Manager.

1.1.53 "Notice in Writing" or "Written Notice" shall mean a notice in writing, typed or printed or hand written characters, sent (unless delivered personally or otherwise proved to have been received) by registered post or by electronic transmission to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post or by electronic media it would have been delivered.

1.1.54 "Other Contractor" shall mean Contractors engaged by Owner/Project Manager for carrying out other related works and other allied infrastructure facilities required for the Works.

1.1.55 "Owner" shall mean the Tata Power Company Limited in its capacity as Owner of the Facility and the Works and shall include its successors and assigns, as well as authorised officers. 'Project Manager' shall mean The TATA Power Company Limited or duly authorised representatives. "Engineer" shall mean the duly authorised representative of the Owner.

1.1.56 Owner's/Project Manager's Representative" or "Engineer" means the person appointed by the Owner/Project Manager from time to time and notified as such to the Contractor to act as Owner's/Project Manager's Representative for the purposes of the Contract.

1.1.57 "Owner's/Project Manager's Instructions" shall mean any drawings, instructions, details, directions and explanations, in Writing issued by the Owner/Project Manager or the Consultant from time to time during the subsistence of the Contract.

1.1.58 "Owner/Project Manager Permits" means the permits, authorisations, consents and approvals required by the Owner/Project Manager to own, posses, operate and maintain the Works and to operate it for intended purpose.

1.1.59 "Party" means Owner/Project Manager or Contractor individually and "Parties" means Owner/Project Manager and Contractor collectively.

1.1.60 "Permanent Works" means the Permanent Works, equipment and Materials including all Civil and electro-mechanical works to be designed, engineered, manufactured, installed, erected, supplied, executed, commissioned or tested in accordance with the Contract and which form part of the Facility.

1.1.61 "Performance Guarantees" or "Warranty" shall have the meaning set forth in Technical Specifications of Contract.

1.1.62 "Performance Test" means, the test to be carried out in accordance with the provisions of Technical Specifications of Contract to prove and establish the Performance Guarantees as per Technical Specifications of Contract.

1.1.63 "Permit" means any valid permit, authorisation, license, registration, approval, consent, waiver, and exemption, No-Objection Certificate, Approval, variance, franchise or any similar order of or from any Government Instrumentality, court or other body having jurisdiction over the matter in question.

1.1.64 "Person" means any individual, corporation, partnership, association, joint stock Company, trust, unincorporated organisation, Hindu undivided Family, joint venture, government or political subdivision or agency thereof.

1.1.65 "Preliminary Operation" means all activities undertaken as part of Commissioning after Civil and Mechanical Completion up to commencement of Initial Operation and shall include mechanical and electrical checkouts, calibration of instruments and protection devices, Commissioning of sub supporting systems and chemical cleaning of the system/equipment covered under Contract.

1.1.66 "Project" means the works to be performed under the scope of this Contract in accordance with the Contract documents.

1.1.67 "Project Documents" mean collectively this Contract, the State Implementation and Support Agreement, the Land Lease Agreement, Transportation Agreement and any other contracts entered into or to be entered into by the Owner/Project Manager with Other Contractors in connection with the Project including without limitation any contracts for Related Works.

1.1.68 "Provisional Acceptance" or "Take Over" means the provisional acceptance by the Owner/Project Manager of the Works, pursuant to the provisions of hereof.

1.1.69 "Prudent Utility Practices" means those practices, methods, equipment specifications and standards of safety and performance, as the same may change from time to time, as are generally accepted for use in electricity generating utilities taking into account conditions in India and commonly used in prudent electricity generation utility engineering and operations including design, engineering construction, erection, installation, Commissioning, testing, operation of the equipments comprised therein lawfully, safely, efficiently and economically for facilities of the type and size similar to the Project and that generally conforms to the Equipment Manufacturer's operation and maintenance guidelines and also any guidelines provided in this regard by any Government or statutory organisation or a Rating agency and the like.

1.1.70 "Punch List" means the list prepared by Owner/Project Manager at the time of Provisional take over and thereafter periodically revised by Owner/Project Manager as necessary, and in any case updated by Owner/Project Manager within 20 (twenty) days following Owner's/Project Manager's receipt of a Notice of Final take over, in each case with the full co-operation of Contractor, which list shall set forth certain items of Work which remain to be performed by the Contractor in order to ensure that the Works fully complies with all of the standards and requirements set forth in the Contract.

1.1.71 "Related Works" shall mean other than the Work under the Contract performed or to be performed by the Owner/Project Manager or Owner's/Project Manager's Other Contractors in connection with the Facility either prior to, concurrently or subsequently with the Works within or outside the Site with whom the Contractor shall co-ordinate and interface his activities covered by the Contract.

1.1.72 Not Used

1.1.73 "Schedule" shall have the meaning set forth in relevant clause hereof.

1.1.74 "Site" or "Project Site" means all those parcels of land owned by Owner/Project Manager on which the Works will be located, as more particularly identified on the site plan and described in Drawings forming part of Contract hereto.

1.1.75 "Sub-Contractor" means any person named in the Contract as a Sub-contractor, sub-vendor, Manufacturer or supplier for a part of the Works or any person to whom a part of the Works has been subcontracted and the legal successors in title to such Person, but not any assignee of such Person.

1.1.76 "Take Over" or "Taking Over" shall mean Taking-over of the Works for the purpose envisaged under the Contract upon completion of the Performance Tests and fulfilling the conditions as mentioned in relevant clause hereof.

1.1.77 "Take over Certificate" or "Completion certificate" means the certificate issued under relevant clause hereof.

1.1.78 "Temporary Works" means all temporary works of every kind (other than Contractor's equipment) required for the execution and completion of the Works and the remedying of any defects.

1.1.79 "Tender Documents" means the Invitation to Bid together with all documents & amendments thereto and clarifications if any issued by the Owner/Project Manager or the Consultant from time to time in respect thereof.

1.1.80 "Tests" means all tests to be undertaken by the Contractor under or pursuant to the Contract including all the tests set forth in Technical Specifications.

1.1.81 "Tests before Take Over" means the tests prescribed in the Technical Specifications mentioned elsewhere in the Contract and any other such tests as may be agreed between the Owner/Project Manager and Contractor or instructed as a Change Order, which has to be carried out by the Contractor before the Taking Over of the Works.

1.1.82 "Trial Operation" shall have the same meaning as per Technical Specification of Contract.

1.1.83 "Technical Specifications" or "Specification" means all the specifications, drawings, datasheets, BOQ, scope etc which are part of Contract and which form part of technical, performance, workmanship, warranty, scope and all other requirement of the Works as stated therein.

1.1.84 "Warranty Period" for the Works shall mean the period as mentioned in Technical Specifications or Special conditions of Contract beginning from the date of issuance of completion certificate of Works. During this Warranty Period, the Contractor will be liable to rectify defects in the Works if any arisen.

1.1.85 "Works" or "Contract Works" or "Relevant Package" or "Project" means all the work and obligations of the Contractor under the Contract including without limitation, the Work and services described in Specifications including permanent works and temporary works as appropriate under the Contract.

1.1.86 "Writing" shall include any manuscript, typewritten e-mail or printed statement, under or over signature and / or seal of the originator or author as the case may be.

1.2 Law, Language and Measurements

1.2.1 Applicable law to this Contract shall be the Indian Law. The respective rights, privileges, duties and obligations of the OWNER/PROJECT MANAGER and the Contractor under this Contract shall be governed and determined by the Laws of State , where the project is located and of the Republic of India.

1.2.2 All correspondence and documentation pertaining to this Contract shall be in the English language only. The official text of this Contract shall be English, regardless of any translation that may be made for the convenience of the Parties. All correspondence, information, literature, data, manuals, definitive documents, notices, waivers and all other communication, written or otherwise, between the Parties in connection with this Contract shall be in English.

1.2.3 All measurements shall be in metric system

1.3 Stamp Duty and Similar Charges

The costs of stamp duties and similar charges imposed by law on the Contract or Agreement or any part thereof shall be borne by the Contractor.

1.4 Effective Date of Contract

The Contract shall be deemed to have come into force and effect from the date of issue by the Owner/Project Manager of the Letter of Intent or the Notice to proceed to the Contractor or as defined in the Contract Agreement.

1.5 Priority of Documents

In case of any discrepancy/conflict and/or differences in the documents constituting the work order, the order of precedence of the documents shall be as follows:

1. Work Order/Agreement
2. Letter of Intent (LOI)
3. Price Schedule (Bill of Quantity & Unit Rates)

4. Contract Specification
    i) Scope of works
    ii) Special conditions of Contract
    iii) General conditions of Contract
    iv) Technical Requirement
    v) Drawings
    vi) Instruction to bidders

The Contractor is deemed to have full knowledge and understanding of the contents of all the foregoing documents whether contained in or incorporated by reference thereto, and accepted all the terms and conditions contained therein. In the event of any ambiguity or conflict between any of the foregoing Contract Documents, the Contractor shall, prior to commencement of the Contract work, be deemed to have clarified from the Owner/Project Manager all such ambiguities or conflicts. The order of precedence of the foregoing documents shall be the same as listed herein above.

1.6 Documents on Site

The Contractor shall keep on the site one complete set of the Contract, the Documents, Change Orders, communications given or issued under various clauses and sub clauses and the Documents referred /mentioned in sub-clause 1.5 duly authenticated by the Owner's Representative. These Documents shall be either true copies or original documents, the same being verified as true copies by OWNER's Representative. The OWNER/PROJECT MANAGER, the Owner's Representative and his delegates (as referred to in sub-clause 2.4) shall have the right to use such Documents at all reasonable times.

1.7 Communications

All certificates, notices**,** instructions, communications, consents, approvals, orders or determination to be given to the Contractor by the OWNER/PROJECT MANAGER or the Owner's Representative, (in as many copies required) and all notices or communication, to be given to the OWNER/PROJECT MANAGER or to the Owner's Representative by the Contractor, shall be in Writing and may either be delivered by hand against written acknowledgement of receipt, or be sent by airmail or one of the agreed systems of electronic transmission as agreed by the OWNER/PROJECT MANAGER. The Contractor shall maintain a separate set of copies of all the inward and outward correspondences which should be produced at any time if need be. The Contractor shall act or modify actions only on the basis of valid written communications received from the OWNER/PROJECT MANAGER / OWNER's representative and would need to provide the documentary evidence (correspondences received from OWNER/PROJECT MANAGER / OWNER's Representative) if required by the OWNER/PROJECT MANAGER.

1.8 Contractor's Use of Owner/Project Manager's Documents

1.8.1 Copyright in the Owner/Project Manager's requirements and other Documents issued by the OWNER/PROJECT MANAGER or the Owner's Representative to the Contractor shall (as between the parties) remain the property of the OWNER/PROJECT MANAGER. The design, engineering, Drawings and Works layout shall be with the OWNER/PROJECT MANAGER. Contractor may, at

its Cost, copy, use and communicate any such documents for the purposes of the Contract. They shall not, without the Owner/Project Manager's consent, be used, copied or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract including performance of Work

1.8.2 The Contractor shall indemnify the OWNER/PROJECT MANAGER in case of breach of this clause by the Contractor. If these Documents are received by a third party from the Contractor and the third party makes use of these Documents to cause harm or monetary loss to the OWNER/PROJECT MANAGER or use these Documents for their personal gain / monetary gain, the Contractor shall compensate the OWNER/PROJECT MANAGER for the loss suffered as well as for the value of gain derived by third party.

1.9 Confidential Details

1.9.1 The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out his obligations hereunder. The Contractor shall not publish, permit to be published, or disclose any particulars of the Contract in any trade or technical paper or elsewhere without the prior consent in writing of the OWNER/PROJECT MANAGER at the Owner/Project Manager's sole discretion.

1.9.2 The Contractor shall indemnify the OWNER/PROJECT MANAGER in case of breach of this clause. If the confidential details relating to this Contract or its contents are received by a third party from the Contractor and the third party makes use of these details to cause harm or monetary loss to the OWNER/PROJECT MANAGER or use these Documents for their personal gain/ monetary gain, the Contractor shall compensate the OWNER/PROJECT MANAGER for the loss suffered as well as for the value of gain derived by the third party. The Contractor shall not use the confidential details of the Contract for any other purpose except for the strict purpose intended under the Contract.

1.10 Contract Co-ordination and Interface

1.10.1 From fiscal and execution considerations, the Owner/Project Manager may enter into independent stand-alone contracts with one or more Other Contractors for the other packages at the same premises.

1.10.2 The Contractor, shall be responsible for effective coordination and interfacing of all his contracting activities and obligations under the Contract with the activities and obligations of the Other Contractors and Related Works contractors in a seamless manner, irrespective of whether the same is specifically detailed in such Contracts, to ensure that the Guaranteed Time Schedule and Performance Guarantees set forth in the Contracts are properly fulfilled in a timely manner by all such Other Contractors.

1.10.3 It is the responsibility of the Contractor to interface, coordinate and cooperate with Other Contractors. Contractor shall share all information & details about the Works which are reasonably required by Other Contractors to perform works under their respective Contracts or to integrate the Works with other Contractors' works if so required.

1.11 Assignment

1.11.1 The whole of the works included in the Contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign, sub-contract or sublet the Contract or any part, share or interest therein nor shall he take a new partner without the written consent of the Owner/Project Manager. Without prejudice to the above, it is agreed that sub-contracting of all or part of its obligations under this Contract shall not relieve the Contractor from the full and entire responsibility of the Contract (including such obligations thereunder that have been sub-contracted) or from active superintendence of the works during their progress. There shall not be any change in Control of the Contractor without the prior written consent of the Owner / Project Manager.

1.11.2 If the Contractor shall cause any part of the work to be performed by the approved Sub-Contractor, the provisions of this Contract shall apply to such Sub- Contractor and his or its officers, agents or employees in all respects as if they were employees of the Contractor, and the Contractor shall not in any manner thereby, be discharged from his obligations and liability hereunder, but shall be liable hereunder for all acts and negligence of his Sub- Contractor, Sub-contractor's officers, agents and employees, as if they were employees of the Contractor. No sub-contract shall be made by the Contractor, without the written approval of the OWNER/PROJECT MANAGER, of both the sub-contract and the Sub- Contractor, but no such approval of the OWNER/PROJECT MANAGER, of both the sub-contract and the Sub- Contractor, shall affect the provisions hereof or serve to relieve the Contractor of any of the responsibilities and liabilities as described above. Copies of all such sub-contracts shall be furnished to the OWNER/PROJECT MANAGER immediately upon the execution thereof. The OWNER / PROJECT MANAGER may request the Contractor at any time to terminate any sub-contracting arrangement if the OWNER / PROJECT MANAGER is not satisfied with the performance of such Sub-contractor and immediately upon receipt of such request, the Contractor shall terminate such sub-contracting arrangements. The Contractor shall ensure that all sub-contracting arrangements entered into by the Contractor allow it to terminate such sub-contracting arrangements in accordance with the instructions of the OWNER / PROJECT MANAGER, as set out above.

1.12 Relationship between Parties

This Contract is on a principal-to-principal basis only and the Contractor shall act as an independent contractor in the performance of this Contract. The Contract shall not be construed as a partnership or an association of parties. There is no agent and principal relationship between the Parties. Each Party shall be responsible for its own conduct. The Contractor shall ensure at all times that all the work carried out under this Contract either by its own person or through any of its Sub-Contractors shall be always done under its own direct supervision.

2. OWNER / PROJECT MANAGER'S OBLIGATIONS

2.1 Access and Right to use of the Site The OWNER/PROJECT MANAGER shall grant the Contractor right of access to, and make available the Site to the Contractor in accordance with the terms of the Owner/Project Manager's property rights within reasonable time after the Letter of Intent for the performance of the Work or pursuant to and in accordance with the Contract. Such right and use of the Site may not be exclusive to the Contractor. In the execution of the Works, no persons other than the Contractor or his duly appointed representative, duly authorised Sub-contractors and workmen, shall be allowed to do Work on the Site, except by the special permission, in writing by the OWNER's representative.

2.2 Permits Licences & Approvals

2.2.1 The Contractor shall be responsible for applying and obtaining all the Permits, licenses or approvals as required to be obtained by Contractor for carrying out and completion of the Works, in time as per the Schedule agreed in the Contract. The OWNER/PROJECT MANAGER may, at the request and cost of the Contractor assist the Contractor in applying for Contractor Permits and other Construction Permits as defined herein. Such requests may also include requests for the OWNER's/PROJECT MANAGER's assistance in applying for any necessary government consent for the export of Contractor's equipment when it is removed from the Site.

2.2.2 The OWNER's/ PROJECT MANAGER's assistance in applying for Permits, licenses or approvals (for which the Contractor is responsible under the Contract) is not obligatory and the extent of such assistance shall be at the sole discretion and convenience of the OWNER/ PROJECT MANAGER. In any case, the obligations of the Contractor as set out herein shall continue, irrespective of the manner, outcome and extent of assistance from the OWNER/ PROJECT MANAGER. All the necessary fees and any incidental charges required to be paid for obtaining all Contract permits shall be solely borne by and be the sole liability of the Contractor, without any recourse to the OWNER/PROJECT MANAGER.

2.3 Owner's / Project Manager's Other Obligations

OWNER / PROJECT MANAGER shall

a) Designate a person as OWNER's/ PROJECT MANAGER's Representative (the "OWNER's Representative") to be the contact for Contractor with respect to the performance of the Works and Contractor's obligation under the Contract, and shall be authorised to act for and on behalf of OWNER/ PROJECT MANAGER and administer this Contract on OWNER's/ PROJECT MANAGER's behalf, agree up on procedures for co-ordinating OWNER's/ PROJECT MANAGER's efforts with those of Contractor and Other Contracts and as appropriate, make information available to Contractor.

b) Pay in a timely manner in accordance with Terms of Payment, subject to fulfilment of milestones and provided the Contractor is not in breach of Contract, the Contract Price and all other sums, if any, required to be paid by it to Contractor pursuant to the Contract.

2.4 The OWNER's Representative

2.4.1 The Owner's representative's Duties and Authority

The OWNER may appoint separate consultant/s to provide project management consultancy services for the Project. Such consultant/s shall act as an OWNER's Representative to exercise the rights and carry out the duties of the OWNER under the Contract. OWNER's representative shall also include Consultant / Consulting Engineer or Third Party Inspection Agency as required or deemed appropriate or authorised by the OWNER/PROJECT MANAGER. Any act, instruction or decision of the OWNER's representative shall be as if this was an act, instruction or decision of the OWNER. The OWNER shall keep the Contractor informed in writing of the persons designated as the Owner's Representative in accordance with the above provisions.

2.4.2 Except as expressly stated in the Contract, the OWNER's Representative shall have no authority to (a) amend, alter, modify or waive any provision or term of the Contract, or (b) relieve the Contractor of any of his duties, obligations or responsibilities under the Contract. Any proposal, inspection, examination, testing, consent, approval or similar act by the OWNER's Representative (including absence or disapproval) shall not relieve or absolve in any manner whatsoever, the Contractor from any responsibility, liability or obligation under the Contract, including responsibility and liability for his errors, omissions, discrepancies, and non-compliance with the Specifications and any provisions of the Contract.

2.4.3 OWNER's Representative's instructions

The Contractor shall comply with written decision instruction or order given by the OWNER's Representatives (such as have been identified in writing by the OWNER) in accordance with the Contract. The Contractor shall not be authorised to receive instructions from any other Person without the prior written consent of the Owner and the Contractor shall be solely and entirely liable for any acts or omissions carried out under instructions from any Person other than the OWNER or a duly authorised OWNER's Representative.

3. SCOPE OF CONTRACT

3.1 General

3.1.1 The Contractor shall carry out and complete the works in every respect in accordance with this Contract and in accordance with the directions and to the satisfaction of the OWNER/PROJECT MANAGER. The OWNER/PROJECT MANAGER may at his absolute discretion from time to time issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as " OWNER/PROJECT MANAGER 'S Instructions" in regard to:

a) The variation or modification of the design, quality or quantity of works or the omission or substitution of any work.

b**)** Any discrepancy in the drawings or between the Schedule of Quantities and/or drawings and/or specification.

c) The removal from the site of any materials brought thereon by the Contractor and the substitution of any other materials thereof.

d) The removal and/or re-execution of any works executed by the Contractor.

e) The dismissal from the works of any persons employed thereupon.

f) The opening up for inspection of any work covered up.

3.1.2 The Contractor shall forthwith comply with and duly execute any work comprised in such OWNER/PROJECT MANAGER's Instructions provided always that verbal instructions, directions and explanations given to the Contractor or his Superintendent upon the works by the OWNER/PROJECT MANAGER shall, if involving a variation, be confirmed in writing by the Contractor within seven days and the OWNER/PROJECT MANAGER's written approval obtained. Rates of items not mentioned in the Schedule of Quantities and Rates shall be dealt with as extra items.

3.1.3 If compliance with the OWNER/PROJECT MANAGER's Instructions as aforesaid involves work beyond that contemplated by the Contract, then unless the same were issued owing to some breach of this Contract by the Contractor, the OWNER/PROJECT MANAGER shall pay to the Contractor the prices of the said work as an extra to be valued as hereinafter provided.

3.1.4 Free Issue Materials / Equipment (FIM) (as applicable) to the Contractor by the Owner/Project Manager:

If the Contract involves or the Owner/Project Manager & the Contractor mutually agree for the incorporation of any free issue materials / equipment by the Owner/Project Manager depending upon criticality & availability of the materials during the course of the Contract :

(a) Not used

(b) The Contractor shall inspect the free issue materials / equipment at the time of taking delivery thereof and satisfy itself of the quality, quantity and condition of the free issue materials / equipment. THE OWNER/PROJECT MANAGER shall not be liable for any claims or complaints whatsoever in respect of the quality, quantity or condition of the Free issue materials / equipment once the Contractor has taken delivery thereof.

(c) All free issue materials / equipment shall be taken delivery of, transported, held, stored and utilized by the Contractor as trustee of THE OWNER/PROJECT MANAGER, and delivery of the Free Issue Material to the Contractor shall constitute an entrustment thereof by THE OWNER/PROJECT MANAGER to the Contractor with the intent that any transportation, utilization, application or disposal thereof by the Contractor otherwise than for incorporation in the Indigenous Material(s) shall constitute a breach by the Contractor.

(d) The Contractor shall transport the Free issue materials / equipment only by such transportation as is suitable and shall hold and store the Free issue materials / equipment only at such place and/or premises that are air and water tight and otherwise suitable for the storage of the Free issue materials / equipment so as to prevent damage or deterioration or theft or other loss, and shall arrange such watch and ward as shall be necessary to ensure the safety thereof. The Contractor shall exercise the at least the same level of care and diligence in respect of the use, storage, transportation or safety of the free issue materials / equipment that it exercises in respect of its own materials / equipment.

(e) Notwithstanding the Bank Guarantee mentioned in sub-paragraph (a) above, the Contractor shall replace any Free issue materials / equipment which is/are lost, damaged, misused, stolen or deteriorated with other Material(s) of equivalent quantity and quality and condition, and the same shall be deemed to constitute Free issue materials / equipment and the provisions of sub-paragraphs (a) to (f) hereof shall apply thereto in the same manner as to the originally supplied Free issue materials / equipment.

(f) Unused Material(s) from the Free issue materials / equipment shall be returned by the Contractor to THE OWNER/PROJECT MANAGER and if THE OWNER/PROJECT MANAGER so directs, the Contractor shall dispose of the same by sale or otherwise on such terms and conditions as THE OWNER/PROJECT MANAGER may stipulate or approve and the Contractor shall pay to THE OWNER/PROJECT MANAGER the sale proceeds of the Material(s) so disposed of by sale.

(g) CONTRACTOR shall ensure quarterly physical assessment of the stock of material issued to him by the OWNER/PROJECT MANAGER and submit the same in the form of Reconciliation.

(h) The free issue materials will be supplied by the OWNER in bags, sizes and lengths or in coils as available. The cost of all wastage, due to rolling tolerance, cutting, conversion, straightening and/or fabricating shall be borne by the CONTRACTOR, at the recovery rates given in item No (i) below, as long as wastage margin does not exceed following limits:

1) Cement 2% - Reconciliation of cement shall be done as per standard practice as per relevant IS code and any wastage above 2% shall be recovered from the Contractor at the rate mentioned in item No (i) of clause 3.1.4 stated below.

2) Structural steel at 3% of the theoretical requirements – 2.5 % is considered as visible wastage and 0.5 % as invisible wastage like gas cutting etc. Rolling tolerance if any shall be recorded separately and due credit or consideration shall be given during reconciliation. All scraps shall be the property of OWNER. The scraps shall be properly accounted for and no scrap or cut pieces shall be removed from site or disposed off without prior inspection and written permission by the ENGINEER. All scraps are deemed to be included within the above allowances. The following dimensions shall be considered for reconciliation purposes

Structural sections less than 75 mm in any dimension - 1.2 meters and above

Structural sections exceeding 75 mm in any dimension-2.0 meters and above

Plates-Up to 12mm thickness - 200mm x 200mm and above

14mm to 25 mm thickness-300mm x 300 mm and above

25mm thickness – 400mm x 400mm and above

Provided further, if the ENGINEER so desires, the CONTRACTOR shall have to return to the OWNER cut pieces or scrap even below the dimension stated above. Due credit will be given for such return at rates to be fixed by the ENGINEER.

3) Reinforcement steel at 3% of the theoretical requirements – 2.5 % is considered as visible wastage and 0.5% as invisible wastage like cutting etc. Rolling tolerance if any shall be recorded separately and due credit or consideration shall be given during reconciliation. All scraps shall be the property of OWNER. The scraps shall be properly accounted for and no scrap or cut pieces shall be removed from site or disposed off without prior inspection and written permission by the ENGINEER. All scraps are deemed to be included within the above allowances. The following dimensions shall be considered for reconciliation purposes:

Reinforcement Steel Up to 16mm dia – 2 meters and above

Reinforcement Steel above 16mm dia – 3 meters and above

Provided further, if the ENGINEER so desires, the CONTRACTOR shall have to return to the OWNER cut pieces or scrap even below the dimension stated above. Due credit will be given for such return at rates to be fixed by the ENGINEER.

(i) Recovery for unaccountable wastages, i.e. in excess of limits stated as above or for the material that is not reconciled, shall be made from the CONTRACTOR at prevailing market rate plus 25 %. The OWNER shall decide the quantities of materials for which such value is to be recovered and decision of the OWNER/ENGINEER shall be final and binding.

3.2 Labour and Personnel

3.2.1 The Contractor shall make his own arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, food and transport. Contractor shall provide all labour and personnel required in connection with Work, including:

a) Professional engineers licensed in accordance with any applicable licensing requirements in India or by any other governmental instrumentality to perform engineering services pursuant to the Contract.

b) Project team of necessary engineers from various disciplines including, construction manager, Project engineer and civil, mechanical, electrical, instrumentation and control, costing,

scheduling, procurement, construction, start-up and training supervisors, all of whom shall follow Good Engineering Practices and shall have had extensive experience in projects of similar nature and magnitude and shall be proficient in the English language and have knowledge of standard industry Practices, Applicable Laws and Applicable Permits.

c) A Project Coordinator or other Representative, who shall be fully acquainted with the Project, shall be proficient in the English language and shall have the authority to administer this Agreement on behalf of Contractor. He shall give his whole time to the construction, erection and execution of the Works and to directing the preparation of all documents required for the same. Except as otherwise stated in the Contract, the Contractor's Representative shall receive (on behalf of the Contractor) all notices, instructions, consents, approvals, certificates, determinations and other communications under the Contract. Whenever the Contractor's Representative is to be absent from the site, a suitable replacement person shall be appointed, and the OWNER/PROJECT MANAGER / OWNER's Representative shall be notified accordingly.

d) Quality assurance & Safety personnel, all of whom shall report directly to Contractor's designated home office managers and not to the Project personnel located at the Site.

e) CONTRACTOR shall give first preference for suitable skilled/unskilled local labours who have been affected due to implementation of this project.

The Contractor shall employ (or cause to be employed) only persons who are careful and appropriately qualified, skilled and experienced in their respective trades or occupations. Upon OWNER's/ PROJECT MANAGER's request, Contractor shall provide OWNER/ PROJECT MANAGER with the resumes of, and arrange for the interview by OWNER/ PROJECT MANAGER of, any or all personnel described in clauses (a), (b), (c) & (d) of this Section 3.2.1. In addition, OWNER/ PROJECT MANAGER will have the right to approve those individuals who will hold the positions described in clauses (a), (b), (c) and (d) of this Section 3.2.1 and any other key Project personnel employed by Contractor, and OWNER/ PROJECT MANAGER will be afforded the opportunity to choose among candidates for the positions of Project Manager, Project Engineer and Construction Manager. Contractor shall not remove any Project personnel described in clauses (a), (b) & (c) and (d) , of this Section 3.2.1 or any other individual in a supervisory or lead position without the prior consent of OWNER/ PROJECT MANAGER, which consent shall not be unreasonably withheld.

3.2.2 Removal of Staff and Labour

The OWNER/PROJECT MANAGER / OWNER's Representative may require the Contractor by notice in Writing to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative, who in the opinion of the OWNER/PROJECT MANAGER / OWNER's Representative:

a) Persists in any misconduct,

b) Is incompetent or negligent in the performance of his duties,

c) Fails to conform with any provisions of the Contract;

d) Persists in any conduct which is prejudicial to safety, health, or the protection of the environment; or

e) Other good and sufficient reasons.

3.2.3 Rates of Wages and Conditions of Labour

Contractor shall ensure that he pays all his personnel and shall ensure and procure that his Sub-contractors pay to their personnel regularly their wages, overtime and other compensations. The attendance register and the wage register shall be submitted to the OWNER/ PROJECT MANAGER for verification at regular intervals. The Contractor shall also furnish the OWNER/ PROJECT MANAGER at regular intervals as governed by Applicable Laws including local statutes but not less than Monthly intervals, certificates that he has paid to his Sub-contractors and workmen and caused his sub-contractors to pay all the dues to his Sub-contractor workmen. In case such payment is not made regularly bythe Contractor or his Sub-contractors, the OWNER/PROJECT MANAGER will be in his right to make such payments and deduct the same from the Contractor's progress payments. In case the OWNER/PROJECT MANAGER becomes liable to pay any wages or dues to the labour or to any Government agency under any of the provisions of the Minimum Wages Act, Workmen's Compensation Act or any other Applicable law due to act or omission of the Contractor, the OWNER/PROJECT MANAGER may make such payments and shall recover the same from the Contractor's bills. No labourer below the age of eighteen years shall be employed in the work

No price adjustment shall be made on account of Minimum wages during contract period including extension period if any.

3.2.4 Persons in the Service of Others

The Contractor or any of his Sub-contractors shall not recruit, or attempt to recruit, his staff and labour from amongst persons in the service of the OWNER/PROJECT MANAGER or other Contractors and agencies engaged by the OWNER/PROJECT MANAGER or the OWNER's Representative.

3.2.5 Labour Laws

3.2.5.1 Any personnel engaged by the Contractor in accordance with and in pursuance of this Agreement shall be the employees / sub-contractors of the Contractor and the Contractor shall be solely liable for and responsible to such personnel. The Owner shall have no responsibility towards any such personnel and such personnel shall, in no event, be deemed to be the employees or sub-contractors of the Owner. The Contractor shall comply with and shall ensure that he/his Sub-contractors comply with all the relevant labour laws applicable to his/ his Sub-contractors employees, and shall duly pay and afford and cause his Sub-contractors to pay and afford to them all their legal rights. The Contractor shall require all such employees to obey all Applicable Laws and regulations concerning safety at Work.

Contractor shall be responsible for all labour relation matters relating to the Work and shall at all times use its best efforts to maintain harmony among the personnel employed in connection with the Work whether by the Contractor or his Sub-contractors and shall enter into all necessary labour agreements with such personnel. Contractor and his Sub-contractors shall at all times comply with all Applicable Permits and Applicable Laws relating to employment including but not limited to Contract labour regulations, Workmen Compensation Act, Employee

State Insurance and Provident Fund regulations, retrenchment Compensation etc. and labour welfare and use its best efforts and judgement as an experienced Contractor to adopt and implement policies and practices to avoid Work stoppages, slowdowns, disputes, strikes, lockouts and other labour strife and disagreement.

3.2.5.2 The Contractor shall be fully responsible for the due compliance by him and his sub-contractors with all statutory requirements and with all applicable labour laws including Contract Labour Abolition and Regulation Act, Workmen's Compensation Act, P.F./E.S.I., Labour welfare fund, Act, etc. as may be applicable to the Contractor, the sub-contractors and their employees. The locations where Allied Manpower Management System (On-line system) has been implemented, the Contractor shall ensure necessary declarations and documents are provided in the system, as per the role of the Contractor envisaged in the system.

The Contractor should get in touch with the local HR/IR/ES&A teams for completion of Statutory compliances before start of the work. The contractor should also ensure that he provides correct and complete PF compliance data for a wage month in the format provided by the HR/IR/ES&A teams on or before 15th of the subsequent month, failing which penalty of 1% of the value of the Invoice, per day of delay would be deducted from the Invoice raised. Further, the management will also have a right to suspend the work in case of delay in submitting the PF data.

All other compliances required by HR/IR/ES&A teams should also be provided as per timelines.

The Contractor shall fully indemnify and save harmless the Owner from and against all claims, demands, expenses, losses, liabilities, charges, actions, suits and proceedings whatsoever including claims under aforesaid Acts and laws which may be brought or made against the Owner, its Officers or servants by reason or in consequence of any matter or thing done or omitted or delaying the submission of data by the Contractor and/ or its sub-contractors and all costs, charges and expenses which may become payable by the Owner in respect thereof."

3.2.6 Working Hours

No work shall be carried out on the Site outside the normal working hours or on the locally recognised Days of rest or local festivals / holidays, unless:

a) Contract so provides after fulfilling Owner / Project Manager's process and procedures for the said working,

b) Work is unavoidable, or necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Owner/Project Manager/Owner's Representative,

c) Owner/Project Manager/Owner's Representative gives his consent,

d) Extended working hours/shift working is essential for achieving Project progress/milestones at no extra cost to the Owner/Project Manager.

e) The CONTRACTOR is normally expected to work during daytime and is required to complete the work in all respects as stipulated elsewhere. For achieving Project progress/milestones, based on a specific request by the Contractor, OWNER/PROJECT MANAGER/Owner's Representative may consider granting permission for working during the night shifts, if he considers it essential with no extra cost to the Owner/Project Manager. .Night work to be carried out only after obtaining necessary clearances and approval of the PROJECT MANAGER/Owner's representative.

Sufficient lights shall be provided by the Contractor to safeguard the workmen and the public and to afford adequate facilities for properly placing and inspecting the material when the night work is in progress. CONTRACTOR should be geared and in readiness to carry out extended shifts, including night shift and abide by all statutory and safety requirements in respect thereof.

3.2.7 Facilities for Staff and Labour

The Contractor shall provide and maintain all necessary accommodation and welfare facilities for his (and his Sub-Contractor's) staff and labour. The Contractor shall also provide the facilities specified in the Contract including Specifications, for the OWNER/PROJECT MANAGER's and OWNER's Representative's personnel. The Contractor shall not permit any of his or his Sub-contractors employees to maintain any temporary or permanent living quarters within the structures forming part of the Works or Project Site. Contractor shall make his own arrangements to procure and construct adequate labour housing outside the PROJECT Site and colony battery limits. No areas inside the OWNER's land and Project Site shall be used as labour colony. No workers/labourers/supervisors or other Contractor's or Sub Contractor's personnel should be allowed to stay within the OWNER's land area after his duty hours. Similarly no workers / labourers / supervisors or other Contractor's or Sub-Contractor's personnel shall be allowed to enter the OWNER's land area before the start of their respective duty time.

3.2.8 Health and Safety Precautions

Precautions shall be taken by the Contractor to ensure the health and safety of his and his Sub-Contractors staff and labour. The Contractor shall, in collaboration with and according to the requirements of the local health authorities, ensure that medical staff, first aid facilities, sick bay and ambulance service are available at the accommodation and on the Site at all times, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The Contractor shall maintain records and make reports concerning health, safety and welfare of Persons, and damage to property, as the OWNER's Representative may reasonably require. Contractor shall be responsible for the medical treatment / hospitalisation of his and his Sub-Contractor's staff / labour.

The Contractor shall appoint a member of his staff at the Site to be responsible for maintaining the safety, and protection against accidents, of all personnel on the Site. The Contractor shall pay particular attention to ensure safety of his staff and workmen and others persons in the vicinity of the Site and shall be responsible for any loss of life or injury to person due to negligence or any other causes whatsoever except natural causes. He shall provide all necessary

fencing and lights required to prevent accidents and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with consent of the Contractor be paid to compromise any claim of any such person. Contractor shall comply with the Owner's/Project Manager's Safety Terms & Conditions, Health Safety & Environment Manual with sustainability document which is annexed to the GCC.

Without prejudice to the other provisions contained herein, the Contractor agrees to reinstate all damage of every sort mentioned in this clause so as to deliver the whole of the Contract work complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

The Contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, guards, sign boards, temporary passages, or other protection necessary for the purpose. All work shall be done at the Contractor's risk, and if any loss or damage shall result for fire or from other cause, the Contractor shall promptly repair or replace such loss or damage free from all expenses to the OWNER/PROJECT MANAGER. The Contractor shall be responsible for any loss or damage to material, tools or other articles used or held for use in connection with the work. The work shall be carried on to completion without damage to any work or property of the OWNER/PROJECT MANAGER or of others and without interference with the operation of existing machinery or equipment.

The use of explosives in a manner, which might disturb or endanger the stability, safety, or quality of the works, will not be allowed. Explosives shall be stored, handled and used as prescribed by the law and regulation of the Indian Union, the State in which the work is performed and sub-divisions thereof. Special attention must be given to immediate disposal of paper wrappings from explosives, which are poisonous to livestock.

Technical and safety evaluation of Contractor's sub-contractor shall be done jointly by Owner/Project Manager.

3.2.9 Contractor's Superintendence

The Contractor shall provide all necessary superintendence during the construction, erection and execution of the Works, and as long thereafter as the OWNER's Representative may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. Such superintendence shall be given by the sufficient persons having adequate knowledge of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents) for the satisfactory and safe execution of the Works.

3.3 Permitting

3.3.1 Contractor and Construction Permits

Contractor shall obtain and maintain, all necessary permits required for the performance of its obligations hereunder, including those required for construction related activities and shall at all times, comply with all the terms and conditions as may be specified in such permits. If Contractor at any time becomes aware, whether as a result of notice from OWNER/PROJECT MANAGER or otherwise, of any applicable permit not obtained by him, Contractor shall promptly give notice thereof to OWNER/PROJECT MANAGER and Contractor shall be responsible for obtaining such Applicable Permit.

The Contractor shall fully indemnify and hold harmless OWNER/PROJECT MANAGER and all OWNER/PROJECT MANAGER and their respective shareholders, directors, employees and officials from any losses damages arising from and out of the Contractor's failure to secure such permits or comply with any terms and conditions stated therein.

3.3.2 Support to OWNER/PROJECT MANAGER for Permits

In case OWNER/PROJECT MANAGER is responsible for the permits, Contractor shall provide support to OWNER/PROJECT MANAGER in obtaining all OWNER/PROJECT MANAGER Permits. Such Contractor support shall include:

a) Attendance at meetings with OWNER/PROJECT MANAGER and third parties designated by OWNER/PROJECT MANAGER;

b) Assistance in Preparation of Permit applications or, as applicable, application to transfer permits to the OWNER/PROJECT MANAGER;

c) Assistance in preparation of responses to inquiries by Governmental Instrumentalities / agencies;

d) Assistance in presentations at hearing of Governmental Instrumentalities / agencies, and

e) Provision of all available information and Documents required by OWNER/PROJECT MANAGER in connection with obtaining any OWNER/PROJECT MANAGER Permits;

3.4 Co-operation

3.4.1 The Contractor shall, as specified in the Specification, afford all reasonable opportunities for carrying out their respective Work to:

a) Any other contractors employed by the OWNER/PROJECT MANAGER and their workmen,

b) The personnel of the OWNER/PROJECT MANAGER, and

c) The personnel of any legally constituted public authorities who may be employed in the execution on or near the site of any work not included in the Contract, which the OWNER/PROJECT MANAGER may require to complete the Project.

3.4.2 Contractor shall not hinder the work of other contractors and sub-contractors of OWNER/PROJECT MANAGER, if any employed by or on behalf of OWNER/PROJECT MANAGER at the Plant Site or the Project Site, to introduce and store Materials in those areas of the Plant Site and the Project Site under OWNER/PROJECT MANAGER's direct control and shall cooperate to help them perform their respective services without hindrance or disruption. The Contractor shall also acknowledge that he works in congruence with requirements of lenders, other contractors, Project off takers and other related parties, and provide them appropriate information as and when required by them and not act as to harm the interests of any of them.

3.4.3 Miscellaneous Liabilities in Co-operation with Other Contractors

The Contractor shall also so arrange to perform his Work as to minimize to the maximum extent possible interference with the work of Other Contractors and their workmen.

Any injury or damage that may be sustained by the employees of the Other Contractors or the OWNER/PROJECT MANAGER, or damage to the works of Owner/Project Manager and/or other contractors due to the Contractor's Work shall promptly be made good at contractor's expense.

The OWNER's representative shall determine the resolution of any difference or conflict that may arise between the Contractor and Other Contractors or between the Contractor and the workmen of the OWNER/PROJECT MANAGER in regard to their work.

If the Works of the Contractor is delayed because of any acts or omission of another Contractor, the Contractor shall have no claim against the OWNER/PROJECT MANAGER on this account other than an extension of time for completing his Works, provided the cumulative effect of such delays does not exceed 60 (sixty) Days. If such delays exceed 60 (sixty) Days, the financial and time implications, if any, shall be mutually discussed, provided that the Contractor had notified the OWNER / PROJECT MANAGER of such acts or omissions of the other Contractor immediately upon the occurrence thereof.

The OWNER's Representative shall be notified promptly by the Contractor of any defects or delays in the Other Contractor's Works that could affect the Contractor's Works. The OWNER's Representative shall determine the corrective measures if any, required to rectify this situation after inspection of the Works and such decisions by the OWNER's Representative shall be binding on the Contractor.

The Contractor shall deploy all necessary effective manpower for coordination, expediting and construction supervision required for completion of the works to meet the stipulated quality standards & Project Schedule., In case of deficient performance of the Contractor in this regards is observed by the Owner / Project Manager, the same shall be brought out to the notice of the Contractor in writing. In case Contractor fails to remedy the performance, Owner/Project Manager will rectify the same by deployment of his own resources and the cost of the same shall be recovered from the Contractor, whether by set off against amounts payable to the Contractor under the Contract or directly, to be decided at the sole discretion of the Owner.

Should the works be suspended by reason of strike/riots by CONTRACTOR's own employees or any other cause whatsoever which relates solely to the Contractor or the Contractor's sub-contractors and/or their respective employees and personnel CONTRACTOR shall take all precautions necessary for the protection of work and make good, at his expense, any damage arising from any of these causes and shall indemnify the OWNER for any delays arising on account thereof.

3.5 Construction Facilities, Construction Power, Construction Water Facilities, Sanitary Facilities, Telecommunication Facilities, Mail Service, Catering, Start-up Spares and Consumables

3.5.1 During the Contract Period, the Contractor shall arrange and pay for construction fuel necessary for the performance of the Work. Contractor shall arrange and pay for lubricants, chemicals, and other consumables in sufficient quantities, and the disposal of sewage and other Contractor generated and Sub-contractor generated wastes, as necessary, to enable Contractor and each Sub-Contractor to perform the Work until takeover of the Works.

3.5.2 Construction Power Supplies

The Contractor shall be responsible for procuring power required for construction activities. However construction power may be made available at OWNER/PROJECT MANAGER's discretion at the Project Site at one point, on chargeable basis, by the OWNER and the Contractor shall make his own arrangements for further distribution of such power and shall be responsible for the maintenance of his power distribution system. The Contractor shall be responsible for payment of Energy Bills of such Construction Power till issue of Completion Certificate. The Construction Power system by its design and nature shall be a temporary system and not part of the permanent power supply.

Contractor shall be responsible for making its own assessment of the quantum of Construction Power required and shall be furnished. The Contractor acknowledges that electricity sourced from a distributing Licensee in that area through the Tata Power Company Limited may be subject to disturbances, and its interruption or non-availability for any reason shall not constitute a condition for claim of extra time or costs on part of Contractor. The Contractor shall make adequate provision for D.G. sets as a standby power source for all the activities/process, which requires uninterrupted power.

3.5.3 Construction and Drinking Water Facilities

The Contractor shall be responsible for procuring water required for construction and other performance of its obligations under the Contract. However, construction water may be provided by Owner/Project Manager at its discretion on chargeable basis at one point in the Project Site. Further distribution to various consumption points will be the responsibility of the Contractor. Any construction water provided by the Owner / Project Manager will be supplied on chargeable basis.

Drinking water shall be provided by Contractor for his Employees/Workmen.

3.5.4 Sanitary Facilities

Adequate sanitary facilities for the use of persons employed by the Contractor at the construction Site shall be provided and maintained by the Contractor to the extent and in such manner and at such places as shall be acceptable to the OWNER/PROJECT MANAGER. Separate Toilet facilities for both gents and ladies shall be provided

Contractor shall make all temporary arrangements for the treatment and discharge of sewage and drainage from or in connection with the construction and Work Site and shall maintain the same to the satisfaction of the OWNER/ PROJECT MANAGER as long as they may be required. All sanitary waste shall be treated in accordance with the Applicable law including applicable local regulations.

In this regard, Contractor shall prohibit the committing of nuisance on the site or upon the land of the OWNER/PROJECT MANAGER or of adjacent land Owner/Project Managers and any employee of Contractors or his Sub-contractors found violating this provision shall be liable to immediate dismissal.

3.5.5 Canteen Facilities

The Contractor shall arrange for catering services for their staff and workers deployed on the project Site. Costs of catering services towards OWNER/PROJECT MANAGER / OWNER's Representative's Site staff would be borne by OWNER/PROJECT MANAGER / OWNER's Representative if services are availed.

3.5.6 Mail Service

A central mailing office shall be established and manned by the Contractor on the site where personal and business mail may be collected and delivered.

3.6 Access: Office Accommodations

Contractor shall provide OWNER/PROJECT MANAGER and its Engineers (including the OWNER/PROJECT MANAGER / OWNER's Representative and the Financing parties) with reasonable access to Contractor's home office and Contractor's offices at the Site and at all design, engineering, fabrication, construction and other premises of Contractor and its Sub-Contractors where activities relating to Works is carried on at all times upon reasonable prior notice, including access to design, engineering, fabrication, and testing, construction facilities, Drawings, Documents sufficient to permit OWNER/PROJECT MANAGER/OWNER's representatives to inspect Work being performed and to monitor compliance by Contractor and the Sub-contractors with the terms of the Contract and directions of Contractor.

Contractor shall provide to OWNER/PROJECT MANAGER/ OWNER's representatives as and when required appropriate office facility at the home office of Contractor.

3.7 Clean-Up and Waste Disposal

3.7.1 The Contractor shall be responsible for keeping the entire area allocated to him clean and free from accumulation of waste Materials, rubbish/debris/etc. at all times during the period of Contract.

The Contractor shall employ enough number of specialised personnel to thoroughly clean his Work area at least once a Day and dispose of the rubbish. All such rubbish and scrap material shall be scrapped or disposed in a place to be identified by the OWNER's Representative.

Materials and stores shall be so arranged as to permit easy cleaning of the area. In areas where equipment might drip oil and cause damage to the floor surface a suitable protective cover of flame resistant, oil proof sheet shall be provided to protect the floor from such damage. Also spillage of oil and its soaking into soil shall be prevented. In case garbage are found disposed in areas other than allotted to the contractor, then the same shall be cleared by the OWNER/PROJECT MANAGER and the charges debited to the concerned Contractor.

Contractor's labour camp and housing colony shall be maintained to the good standards of hygiene and shall be kept reasonably free of debris, litter and mal-odour.

Similarly the labour colony, offices and residential areas of Contractor's employees and workmen shall be kept clean and neat to the entire satisfaction of the OWNER's Representative. Proper sanitary arrangements shall be provided by the Contractor in the Work areas, office and residential areas of the Contractor.

The Contractor shall cause all Sub-contractors, at all times to keep the Site reasonably clean and otherwise free from accumulation of waste materials, rubbish, other debris resulting from performance of the Work. In case Owner/Project Manager is not satisfied regarding contractor his subcontractors cleanliness at site, Owner/Project Manager will notify regarding the same to the Contractor. In case of non-improvement / satisfaction, Owner/Project Manager will get the site cleaned and the charges of the same will be debited to Contractors account.

3.7.2 All soil, filth or other matter of an offensive nature taken out of any excavation, trench, sewer, drain, cesspool etc shall not be deposited on the surface, but shall at once be carted away by the Contractor to some pit or place suitably arranged by him away from the site of work and approved by local authorities.

3.7.3 As a part of the work included in this Contract, the Contractor shall completely remove and satisfactorily dispose of all temporary works to the extent directed. He shall tear down and dispose off all temporary buildings, shall remove or grade, to the extent directed, all embankments or coffer dams made for construction purposes shall remove all plant and equipment, shall satisfactorily dispose of all rubbish resulting from the operations under this Contract and shall do all work necessary to restore the territory embraced within the site of his operations to at least as good order and conditions as at the beginning of the work under this Contract.

3.7.4 With regards to solid waste management**, Contractor** shall comply with Notification dated 29-March-2016 (Published in Gazette of India, Part II, Section 3, Subsection (ii)) by Ministry of Environment, Forest & climate change, Govt of India.

3.8 Reporting Requirements

3.8.1 Prior to commencement of the Contract Agreement, Contractor shall deliver to OWNER/PROJECT MANAGER/ OWNER's Representative a computer-based network Schedule in hard copy as well as a soft copy (licensed software in one computer of the Owner) in accordance with the Contract.

3.8.2 Progress scheduling report shall be provided by the Contractor to the OWNER/PROJECT MANAGER in accordance with the Contract including, but not limited to, requirements indicated in the Specification. Contractor shall be responsible for,

a) Ensuring that performance of the Work proceeds in accordance with the network Schedule and

b) Co-ordinating the activities of all Sub-contractors.

Contractor to have / arrange Video Conferencing facility at his HO & manufacturing plants and project site for project status reviews / discussions.

Contractor and his sub contractors will comply & follow the online document management systems requirements of the Owner / Project Manager.

3.8.3 Daily Diary and Progress Reports

A daily diary register will be kept in the OWNER/PROJECT MANAGER'S office. The Contractor will supply all detailed information every day at 9.00 hours for the day preceding and the diary will be jointly signed by the OWNER/PROJECT MANAGER/ OWNER'S Representative and the Contractor's representatives, every day in token of its correctness. A works instruction book, serially numbered will also be kept in the OWNER/PROJECT MANAGER'S office and all day-to-day instructions will be given in that book. The Contractor's representative shall report everyday to see these instructions and sign them at the bottom in token of his having seen them.

The CONTRACTOR shall supply all information regarding procurement of materials and progress of construction work, as is required by the ENGINEER for compiling the weekly progress reports. This information shall be supplied by 9.00 hours on every Monday, for the preceding week.

The CONTRACTOR shall furnish the ENGINEER with two levels of report (Weekly & Monthly)as per the format as approved by OWNER/PROJECT MANAGER.

Apart from this the CONTRACTOR is required to submit a daily report of the skilled labour and plant, equipment and other resources deployed by him at the project site. This shall include the resources of the sub-CONTRACTOR if any.

3.9 Schedule

3.9.1 Time is the essence of this contract. The CONTRACTOR shall, within one week of receipt of the Letter of Intent has to submit to the OWNER for his approval, a detailed work schedule adhering to the timeline as stated in Special Conditions of Contract, before starting the Work to achieve completion schedule both interim and ultimate. After the OWNER has agreed with the schedule, the CONTRACTOR shall prepare detailed program of each work front/activity breaking it down giving daily quantifiable/measure of progress. The schedules are to be reviewed periodically with the OWNER to ensure that the completion date will be met or to institute corrective steps (at no extra cost to the OWNER) to adhere to the completion dates. The OWNER reserves the right to revise the schedule at his discretion in order ensure completion within the completion date and to suit the Project requirement and such alterations shall not entitle the CONTRACTOR to any extra payment. The Contractor shall provide to the OWNER/ PROJECT MANAGER for approval within the time stated in clause 3.8.1 the programme for the execution of the contract, showing (a) the sequence and timing of activities by which the contractor proposes to carry out the work and (b) the times by which the Contractor requires the OWNER/PROJECT MANAGER to furnish any OWNER/PROJECT MANAGER's inputs as set forth in the specifications, which as and when approved shall form the Schedule.

3.9.2 Without prejudice and in addition to the foregoing the Contractor shall prepare and furnish to OWNER/PROJECT MANAGER updated monthly schedules of the Work to be performed, including a critical path schedule.

3.9.3 Not Used.

3.9.4 The Schedule that is updated on a Monthly basis shall be done from the basic schedules which together with the updated monthly Schedule shall be available in a computer system to which the OWNER/PROJECT MANAGER/OWNER's Representative will have access to facilitate the OWNER/PROJECT MANAGER to review the various levels to independently analyse the relevant information. This, however, does not take away the responsibility of the Contractor to fulfil all his obligations under the Contract, including informing the OWNER/PROJECT MANAGER/OWNER's Representative about the delays as also the expected delays and the actual plans to overcome such delays.

3.9.5 CONTRACTOR shall arrange for the mobilisation of all equipment, material, personnel and all other resources to progress the work at the site to suit the completion dates of the Works. No financial, time extension or other claims for idling or under-utilisation of CONTRACTOR's resources will be entertained or paid by OWNER unless certified by OWNER's ENGINEER.

3.9.6 CONTRACTOR shall identify suitable quarries for uninterrupted supply of coarse and fine aggregates and sources of all other construction materials and make necessary arrangements for transportation of the same at its own cost. If quarries and sources of other materials are located faraway, CONTRACTOR shall at all times have reserve storage of all the construction materials so as not to affect the required rate of progress.

3.10 Taxes

3.10.1 Taxes to the Contractor's Account

i) The price quoted by the Contractor in the Schedule of Quantities mentioned elsewhere in the Contract are inclusive of applicable taxes including CGST, SGST IGST , custom duty, royalties and/or any other duty/tax levied by Central, State Governments, local bodies or other Public bodies. The tax component (CGST, SGST & IGST) shall be shown separately in price breakup.

The agreed rates and price shall be deemed to include all materials, labour, plant & equipment and everything necessary to satisfactorily the agreed contract works, rates shall also include for everything in the Technical specifications & all activities/things required to complete the particular item. The rates shall be firm till the tenancy of Contract and shall not be subject to escalation on any ground whatsoever. The Contractor when called for by the OWNER/PROJECT MANAGER shall furnish detailed analysis in support of the rates quoted by him against each item of the Contract. The OWNER/PROJECT MANAGER reserves the right to utilise the analysis thus supplied in settling any deviations or claims arising out of this Contract.

ii) Except as otherwise specifically provided in the Contract irrespective of the mode of Contracting, the Contractor shall bear and pay all taxes, duties, levies, charges, interest and penalties and the like levied and /or assessed on the Contractor, its Sub-contractors, or their employees, by all municipal, local bodies, state or national government authorities or any other Government Instrumentality in connection with the Works.

iii) The Contractor, hereby agrees to indemnify and keep indemnified and saved harmless at all times the OWNER / PROJECT MANAGER against any loss, Cost, expenses or damages suffered or incurred by it, by reason of its failure to pay taxes, duties, etc which it is obliged to pay pursuant to the provisions of this clause and / or arising out of its failure to comply with its obligations under this clause.

iv) The OWNER/PROJECT MANAGER shall recover from the Contractor and / or adjust from the Contract Price all taxes, duties, levies, charges, interest and penalties and the like leviable and / or assessable on the Contractor, its Sub-contractors or their employees but levied and / or assessed on the OWNER/PROJECT MANAGER as a representative assessee / agent of the Contractor, its Sub-contractors or their employees, by all municipal, local, state or national government authorities or any other Government Instrumentality in connection with the Work.

v) Further the OWNER/PROJECT MANAGER shall recover from the Contractor and / or adjust from the Contract Price, simple interest at the rate of Short term Prime lending Rate of State Bank of India from the date of payment of all taxes, duties, levies, charges, interest and penalties and the like leviable and / or assessable on the Contractor, its Sub-contractors or their employees but levied and / or assessable on the OWNER/PROJECT MANAGER as a representative assessee / agent of the Contractor, its Sub-contractors or their employees, by all municipal, local, state or national government authorities or any other Government Instrumentality in connection with the Work.

3.10.2 Variation in Tax or Applicable Taxes or Introduction of New Taxes

i) Any statutory variation in rate of applicable Indian taxes, duties, levies etc., any variation in applicable taxes or interpretation/enforcement of the same or introduction of new taxes or the introduction/amendment of any exemptions (other than Direct taxes i.e. Income Tax, corporate tax etc), levied in India, starting from 2 (two) Days prior to the Closing Date for submission of Bid but within the Guaranteed Completion Date of Works, shall be to the account of the OWNER/PROJECT MANAGER. Such adjustment shall be limited to direct transactions between the OWNER/PROJECT MANAGER and the Contractor and no amounts shall be payable on account of variation on taxes, duties and levies between the Contractor and its sub vendors/Sub-contractors/suppliers.

ii) Any statutory variation on account of aforementioned factors shall be reimbursed by OWNER/PROJECT MANAGER to Contractor or by the Contractor to the OWNER/PROJECT MANAGER, as the case may be, against submission of documentary evidence in support thereof. However, in case of delay, from the originally prepared network Schedule, Schedule and Guaranteed Completion Dates as may be relevant for the computation thereof, due to reasons not attributable to the OWNER/PROJECT MANAGER, any statutory variation adverse to the OWNER/PROJECT MANAGER over and above those specified under “Schedule of Quantity and Rates” as given elsewhere in the Contract, including any taxes during the delayed period shall be to the Contractor’s account and the OWNER/PROJECT MANAGER shall not be liable for the same in any manner whatsoever.

iii) The Contractor is obligated to keep the OWNER/PROJECT MANAGER/OWNER’s Representative notified of the aforesaid statutory variations within 15(fifteen) days of such variation coming into effect.

3.10.3 The tax invoices shall contain the details to comply with the GST Law. The Contractor shall,

i) Furnish (electronically) and communicate to the Owner, the details of Goods or Services supplied by the 10th of the month succeeding the said tax period,
ii) Upon discovery of any discrepancy, rectify it and shall pay the tax and interest thereof,
iii) Furnish the returns (electronically), for the inward and outward supplies of Goods and/or Services, before the specified dates as per the GST Law,
iv) Communicate the tax paid, credits etc. as and when credited.
v) The Invoice should clearly state the description of the goods, quantity, sale price, tax %, and tax amount;
vi) The Invoice should be signed by an Authorized Signatory.

Bills/Invoices in the name of The Tata Power Company Ltd. with packing lists in triplicate shall be forwarded along with the equipment.

Contractor to furnish GST Registration number in all invoices as well as Owner's GST number.

3.10.4 In case any taxable service is provided by any Contractor who is a non-resident or who does not have an office in India, then contractor shall undertake to appoint a representative in India. The contractor shall pay the required amount of GST to this representative who in turn shall effect the payment of the tax to appropriate authority. Owner/Project Manager will not take any responsibility to pay GST.

On the basis of documentary proof of such payment of tax, the OWNER/PROJECT MANAGER would be entitled to declare the particulars thereof in his GST return.

The agreed rates against items in schedule of quantities and shall be deemed to be inclusive of GST. The Owner/Project Manager will not pay any extra cost towards GST.

3.10.5 Withholding taxes

The OWNER/PROJECT MANAGER shall pay, out of the Contract Price, any withholding tax charged by any Government Instrumentality including the Government of India or any Indian State Government on the Contract or the performance of the Work pursuant to or under the Contract. The OWNER/PROJECT MANAGER shall furnish to the Contractor appropriate documentation / certificates/ challans evidencing payment of any such withholding tax.

Should any tax benefit accrue to the Contractor in Country of the Contractor / or OWNER/PROJECT MANAGER by way of deduction as expenses or as tax credit or otherwise against its tax liability, or on account of any taxes paid in India by the OWNER/PROJECT MANAGER pursuant to the Contract or any Applicable Law on account of this Contract, the Contractor shall forthwith pay the same to the OWNER/PROJECT MANAGER. The Contractor agrees and undertakes to furnish to the OWNER/PROJECT MANAGER every year till the end of the period during which the Contractor is entitled to any tax benefit in India or elsewhere pursuant to this clause or completion of its tax assessment whichever, is later, a Certificate from its independent Auditors or an independent certified public accountant acceptable to the OWNER/PROJECT MANAGER, the quantum of such tax benefit, if any, and basis for arriving at such tax benefits.

3.10.6 Benefit of credit for tax

For tax, levy, duty concessions Owner/Project Manager will initiate necessary applications & the procedures and will expedite the documentation / certification required in time for availing the benefits. In case of unforeseen delays from the approving authorities, contractors shall manage the implications and will carry out necessary documentation / submissions to avail these benefits at a later date once the Owner/Project Manager is in receipt of the required certificate.
If, as a result of any agreement, whether existing or modified or signed in future on avoidance of double taxation between the Government of India and the Government of the Contractor's Country or under any law, any tax benefit shall accrue to the Contractor in Country of the Contractor or by way of deduction as expenses or as tax credit or refund or otherwise against its tax liability or on account of taxes, which are paid in India by the OWNER/PROJECT MANAGER pursuant to this Contract, the benefit of such credit, deduction as expense or refund along with details shall be passed on to the OWNER/PROJECT MANAGER within 15 (fifteen) days of the

receipt of such credit / refund/deduction as expense or otherwise by the Contractor/expatriate. The Contractor/its expatriates shall take immediate and appropriate action for obtaining the admissible credit or refund from such Country's authorities and payment of the same to the OWNER/PROJECT MANAGER. The Contractor shall keep the OWNER/PROJECT MANAGER informed about the same at all times.

The Contractor shall furnish on an annual basis, a certificate from an independent Chartered Accountant confirming:

a) The amount of credit or refund or deduction as expense or otherwise that may be due, if any, to it on account of tax paid by the OWNER/PROJECT MANAGER in India in respect of payments under the Contract to the Contractor; and

b) Amount of credit or refund that may be obtained or deduction as expense that may be permissible, if any, during the relevant period.

No such annual certificate is required with regard to expatriates' tax credit or refund. However, the Contractor will inform the OWNER/PROJECT MANAGER of all such credits or refunds obtained by its expatriates as aforesaid.

3.11 Security & Safety Rules Of Owner

3.11.1 The site is a protected place and entry to the site is restricted. No person shall be employed or allowed on the site without the prior permission in writing from the OWNER. All persons employed or allowed at the site shall at all times conform to all regulations laid down by the OWNER.

3.11.2 The Contractor shall strictly follow Project Security Instructions and maintain proper control on movement of his men/materials. He shall implement the procedures for entry token/passes at his cost as required. He will record entry of all incoming materials, as no materials, which are returnable, will be permitted to be removed if not recorded at the time of entry. CONTRACTOR shall strictly abide by the rules and regulations of security and safety enforced by the OWNER. CONTRACTOR shall provide proper identity cards, badges, etc., to its personnel and to its sub-contractors and their personnel whenever directed by the OWNER. CONTRACTOR shall be solely responsible for the safety and security of its personnel and equipment.

3.11.3 Contractor shall do all things necessary or expedient to protect any and all parallel, converging and intersecting electric lines and poles, highways, access or other roads, bridges, waterways, railroads, sewer lines, natural gas pipelines, drainage ditches, culverts, fences, walls, and water lines, power or communication cables or lines and any and all physical property of others, from damage resulting directly or indirectly from performance of the Work. Without limiting the generality of the foregoing, Contractor shall maintain the access roads to the Site and all access roads within the Site, in good repair and passable at all times as well as proper drainage system. In the event that any such physical property is damaged or destroyed in the course of the performance of the Work, Contractor at his cost shall rebuild, restore or replace such damaged

or destroyed physical property to full satisfaction of OWNER/PROJECT MANAGER and shall fully indemnify the Owner / Project Manager for any loss or damage suffered by the Owner / Project Manager as a result of any damage thereto from the performance of the Work, whether directly or indirectly.

3.11.4 Contractor shall provide, and shall ensure that its Sub-contractors provide, proper and ample protection from damage or loss to the Works/other packages, the Site, equipment and construction equipment during its performance of the Work.

3.11.5 In the event that any of the Works are damaged or destroyed for any reason prior to acceptance of such work, Contractor shall rebuild, restore or replace the works or such items, subject to and in accordance with the Contract including Specifications. All costs irrespective of reimbursement of claims from Insurance shall be to Contractor's account.

3.11.6 CONTRACTOR shall adopt all safety measures/provide necessary protection to already constructed foundation/structures irrespective of the sequence of construction

3.12 Royalties and License Fees

3.12.1 Contractor shall pay all required royalties and license fees with respect to proprietary rights, intellectual property licenses and agreements, and shall procure, as required, the appropriate proprietary rights, intellectual property licenses and agreements, for Materials, methods, processes, systems and Services incorporated into the Relevant Package or the Project or otherwise relating to the performance of the Work and thereafter for the purpose of operation & maintenance of the Works. Contractor should possess the valid license for the technology used in India by such Contractor from their principals/ technology providers. Contractor shall also arrange backup guarantees from their principals/ technology providers as required by the Owner/Project Manager, to demonstrate the Contractor's legal rights to use such intellectual property.

3.13 Standard for Supplies and Performance

3.13.1 Without limiting any other provision of Contract including Specifications, Contractor shall perform the Work and cause his Sub-contractors to perform their Work hereunder in accordance with Good Construction Practices and standards of professional care, skill, diligence and competence generally accepted in the construction industry applicable to construction & Project management practices for Structures of similar size and type as the Works.

3.14 Fire Protection

3.14.1 The Work procedures that have to be used during the construction / erection shall be those, which minimize fire hazards to the extent practicable. Combustion materials, combustible waste and rubbish shall be collected and removed from the Site at least once each Day. Fuels, oils and volatile of flammable Materials shall be stored away from the construction and equipment and material storage areas in safe containers. Untreated canvas, paper, plastic or

other flammable flexible Materials shall not at all be used at Site for any other purpose unless otherwise specified. If any such Materials are received with the equipment at Site, the same shall be removed and replaced with acceptable material before moving into the construction or storage area.

3.14.2 Similarly corrugated paper fabricated cartons, etc. will not be permitted in the construction area either for storage or for handling of Materials. All such Materials used shall be of waterproof and flame resistant type.

All other Materials such as working Drawings, plans, etc. which are combustible but are essential for the Works to be executed shall be protected against combustion resulting from welding sparks, cutting flames and other similar fire sources.

3.14.3 All the Contractor's supervisory personnel and sufficient number of workers shall be trained for fire fighting and shall be assigned specific fire protection duties. Enough of such trained personnel must be available at the Site during the entire period of the Contract.

3.14.4 The Contractor shall provide enough fire protection equipment of the types and in enough numbers for the ware-houses, office, temporary appropriate structures, labour colony area, etc. Access to such fire protection equipment, shall be easy and be kept open at all times.

3.14.5 Not Used

3.14.6 In the event of occurrence of fire being attributable in the opinion of the Owner / Project Manager to the contractors' negligence no extension of time will be granted.

3.15 Contractor's Equipment and Owner/Project Manager's rights thereof

3.15.1 All equipment provided by the contractor & his Sub-contractors shall be certified, tested & valid by the competent Person. The Contractor shall provide all Contractor's equipment necessary to perform the Work and complete the Works. All Contractors' equipment shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and performance of Services. The Contractor shall not remove from the Site any such Contractor's Equipment without the consent of the OWNER/PROJECT MANAGER / OWNER's Representative. The Contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage thereto.

3.15.2 The OWNER/PROJECT MANAGER shall have lien on such goods for any sum or sums, which may at any time, be due or owing to him by the Contractor, under, in respect of or by reasons of the Contract. After giving a fifteen (15) Days Notice in Writing of his intention to do so, the OWNER/PROJECT MANAGER shall be at liberty to sell and dispose of any such goods, in such manner as he shall think fit including public auction or private treaty and to apply the proceeds in or towards the satisfaction of such sum or sums due as aforesaid.

3.16 Access Route to & at site

The Contractor shall be deemed to have satisfied himself as to the suitability and availability of the access routes to the Site that he chooses to use. The Contractor shall (as between the Parties) be responsible for the maintenance of access routes. The Contractor shall provide any signs or directions, which he may consider necessary for the guidance of his staff, labour and others. The Contractor shall obtain any permission that may be required from the relevant authorities for the use of such routes, signs and directions.

The OWNER/PROJECT MANAGER will not be responsible for any claims which may arise from the use or otherwise of any access route. The OWNER/PROJECT MANAGER does not guarantee the suitability or availability of any particular access route, and will not entertain any claim and shall not be liable for any non-suitability or non-availability for continuous use during construction of any such route.

3.17 Insurance

Contractor shall obtain and maintain all insurance required to be obtained by Contractor as per the Contract and as per statutory requirements including clause no. 4.0 hereof.

3.18 Maintenance of Schedule and Milestone Schedule

If Contractor is not performing the Work at a rate which will maintain the Schedule or the Milestone Schedule, Contractor shall at its own expense shall cause Contractor's personnel, to work such overtime and furnish such additional personnel and construction equipment and resources as may be required to comply with the Schedule or the Milestone Schedule (as the case may be).

3.19 Work and Safety Regulations

3.19.1 The Contractor shall ensure proper safety of all the workmen, Materials and equipments belonging to him or to OWNER/PROJECT MANAGER or to others, working at the Site. The Contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and the OWNER's Representative, as he may deem necessary.

3.19.2 The Contractor shall notify well in advance to the OWNER's Representative of his intention to bring to the Site Container filled with liquid or gaseous fuel or explosive or petroleum substance or such chemicals, which may involve hazards. The OWNER's Representative shall have the right but not the obligation to prescribe the conditions, under which such container is to be stored, handled and used during the performance of the Work and the Contractor shall strictly adhere to and comply with such instructions.

3.19.3 The OWNER's Representative shall have the right but not obligation at his sole discretion to inspect any such container or such construction plant/equipment for which Material in the

Container is required to be used and if in his opinion, its use is not safe, he may forbid its use. No claim due to such prohibition shall be entertained by the OWNER/PROJECT MANAGER and the OWNER/PROJECT MANAGER shall not entertain any claim of the Contractor towards additional safety provisions / conditions to be provided for / constructed as per OWNER's Representative's Instructions.

3.19.4 Wherever it is necessary to provide and / or store petroleum products or petroleum mixtures and explosives, the Contractor shall be responsible for carrying out such provision and / or storage in accordance with the rules and regulations laid down in Petroleum Act 1934, Explosives Act 1948, and Petroleum and Carbide of Calcium Manual Published by the Chief Inspector of Explosives of India as well as other relevant and Applicable Laws, rules and regulations. All such storage shall have prior approval of the OWNER's Representative. In case, any approvals are necessary from the Chief Inspector (Explosives) or any statutory authorities, the Contractor shall be responsible for obtaining the same. Notwithstanding anything contained herein, the Contractor shall not store any petroleum products or petroleum mixtures or any other explosive material in the Site for a period in excess of 7 days, without the prior written consent of the Owner's Representative.

3.19.5 All equipment used in construction and erection by Contractor or his Sub contractors shall meet Indian and International Standards of safety and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipment shall be strictly operated and maintained by the Contractor or his Sub contractors in accordance with Manufacturer's operation manual and safety instructions and as per Guidelines and Rules of the OWNER/PROJECT MANAGER in this regard.

3.19.6 Periodical Examinations and all Tests for all lifting/hoisting equipment and tackles shall be carried out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 2003 and all relevant Law/Rules in force from time to time. A register of such examinations and Test shall be properly maintained by the Contractor and will be promptly produced as and when desired by OWNER's Representative or by the Person authorised by him.

3.19.7 The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need, as may be directed by OWNER's Representative who will also have right to examine these safety equipment to determine their suitability, reliability, acceptability and adaptability.

3.19.8 Where explosives are to be used, the same shall be used under the direct control and supervision of an expert, experienced, qualified and competent Person strictly in accordance with the Code of Practices/Rules framed under relevant laws, rules and regulations not restricted to Indian Explosives Act pertaining to handling, storage and use of explosives.

3.19.9 The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, stairs, ladders, scaffoldings, etc. The scaffoldings shall be erected under the control and supervision of and experienced and competent Person. For erection, good and standard quality of material only shall be used by the Contractor.

3.19.10 The Contractor or his Sub contractors shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the OWNER/PROJECT MANAGER or other Contractors under any circumstance, whatsoever, unless expressly permitted in Writing by the OWNER/PROJECT MANAGER to handle such fuses, wiring or electrical equipment.

3.19.11 Before the Contractor or his Sub contractors connects any electrical appliances to any plug or socket belonging to the other Contractor or OWNER/PROJECT MANAGER, he shall:

a) Satisfy the OWNER's Representative that the appliance is in good working condition

b) Inform the OWNER's Representative of the maximum current rating, voltage and phases of the appliances

c) Obtain permission of the OWNER's Representative detailing the sockets to which the appliance may be connected.

3.19.12 The OWNER's Representative will not grant permission to connect until he is satisfied that:

a) The appliance is in good condition and fitted with a suitable plug.

b) The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.

3.19.13 No electric cable used by the other Contractor/OWNER/PROJECT MANAGER will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.

3.19.14 No repair work shall be carried out on any live equipment. The equipment shall/must be declared safe by OWNER's Representative and a permit to Work shall be issued by OWNER's Representative before any repair work is carried out by the Contractor or his Sub contractors. While working on electric lines/equipments whether live or dead, suitable type and sufficient quantity of tools will have to be provided by Contractor or his Subcontractors to electricians/workmen/officers.

3.19.15 The Contractor shall employ necessary number of qualified, full time Electricians/Electrical Supervisors to maintain his temporary electrical installations.

3.19.16 The Contractor employing more workmen than specified under Factories Act 1948 whether temporary, casual, probationer, regular or permanent or on Contract, shall employ at least required numbers of full time officers exclusively as Safety Officer to supervise the safety aspects of the equipment and workmen who will coordinate with the Project Safety Officer and OWNER's Representative. In case of Work being carried out through Sub-contractors, the Sub-

contractor's workmen/employees will also be considered as the Contractor's workmen/employees for above purpose.

The name and address of such Safety Officers of Contractor will be promptly informed in Writing to OWNER's Representative with a copy to Safety officer-in-charge before he starts Work or immediately after any change of the incumbent is made during currency of the Contract.

3.19.17 In case any accident occurs during the construction/ erection or other associated activities undertaken by the Contractor thereby causing any minor, major or fatal injuries to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor to promptly inform the same to the OWNER's Representative in prescribed form and also to all the authorities envisaged under the Applicable Laws.

3.19.18 The OWNER's Representative shall have the right at his sole discretion to stop the Work, if in his opinion the Work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such cases, the Contractor shall be informed in Writing about the nature of hazards and possible injury/accident and he shall comply with the instructions of the OWNER's Representative including removal of shortcomings promptly. The Contractor after stopping the specific Work, can, if felt necessary, appeal against the order of stoppage of Work within 3 (three) Days of such stoppage of Work and OWNER/PROJECT MANAGER's decision in this respect shall be conclusive and binding on the Contractor.

3.19.19 The Contractor shall not be entitled for any damages/compensation for stoppage of Work due to safety reasons as provided in clause 3.19.18 above and the period of such stoppage of Work will not be taken as an extension of time for completion of Work and will not be the ground for waiver of levy of Liquidated Damages.

3.19.20 The Contractor and his Sub contractors shall follow and comply with all Safety Rules, relevant provisions of Applicable Laws pertaining to safety of workmen, employees, Works and equipment as may be prescribed from time to time without any demur, protest or contest or reservation.

3.19.21 Contractor shall engage Tata Power Skill Development Institute (TPSDI) certified labour force at the site for execution of the job. Requirement & fees for TPSDI certification shall be as per Company Policy.

3.20 Employee Identification, Project Site Security and Protection of Project Site

3.20.1 Contractor shall provide a method which shall be subject to the reasonable approval of Owner/Project Manager, of checking the employees of Contractor, the Subcontractors, Owner/Project Manager and Owner's/Project Manager's other suppliers and Contractors in and out of the areas in which the Work is to be performed under the Contract.

3.20.2 Contractor's employees shall wear identification badges provided by the Owner's Representative while on Work at Site.

3.20.3 Contractor shall be responsible for the security of the Works and the Site at all times and the Goods therein while the Work is being performed or Goods are being supplied up to the earliest of:

a) Final take over and issuance of completion certificate

b) The transfer of care, custody and control of the Works as a whole to Owner /Project Manager with the concurrence of the Owner/Project Manager, or

c) Termination of the Contract.

3.20.4 Contractor shall do all things necessary or expedient to protect any and all parallel, converging and intersecting electric lines and poles, highways, access or other roads, bridges, waterways, railroads, sewer lines, natural gas pipelines, drainage ditches, culverts, fences, walls, and water lines, power or communication cables or lines and any and all physical property of others, from damage resulting directly or indirectly from performance of the Work or in supply and transport of Goods. Without limiting the generality of the foregoing, Contractor shall maintain the access roads to the Site and all access roads within the Site in good condition and passable at all times as well as proper drainage system. In the event that any such physical property is damaged or destroyed in the course of the performance of the Work or in supply and transport of Goods, Contractor at his cost shall rebuild, restore or replace such damaged or destroyed physical property to full satisfaction of Owner/Project Manager.

3.20.5 Contractor shall provide, and shall ensure that its Sub-contractors provide, proper and ample protection from damage or loss to the Relevant Package, the Site, equipment and construction equipment during its performance of the Work.

3.20.6 In the event that any of the Relevant Package or Works are damaged or destroyed for any reason prior to acceptance and Final takeover of such Relevant Package or Works, Contractor shall rebuild, restore or replace the Relevant Package/Works or such items, subject to and in accordance with the Contract. All costs irrespective of reimbursement of claims from Insurance shall be to Contractor's account.

3.21 Safety Programme and Policy

3.21.1 All requirements in the Safety Terms & Conditions enclosed with the Contract are mandatory and to be adhered by the contractor in totality. Contractor shall, and shall cause all Sub-contractors to, implement and administer a safety program for the Relevant Package, subject to the approval of the Owner/Project Manager (which shall not be unreasonably withheld), which shall include:

a) Development of a safety manual (the "Safety Manual") establishing safety guidelines and requirements for Contractor, Sub-contractor (including a fall prevention program). Copies of this manual shall be provided to Owner/Project Manager and Owner's Representative immediately upon its development and Contractor shall incorporate into such Safety Manual any and all reasonable comments of Owner/Project Manager;

b) Conducting of weekly safety meetings with the employees and agents of Owner/Project Manager, Contractor, Sub-contractor and Owner's other Contractors and their Sub-contractors;

c) Development, implementation and enforcement of procedures for advising employees and agents of Owner/Project Manager, Contractor, Sub-contractor and Owner's other Contractors and their Sub-contractors of, and correction of, safety violations and deficiencies;

d) Taking of all other actions necessary to provide a safe Work environment in accordance with Applicable Laws and Applicable Permits. Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to avoid damage, injury or loss to:

i) All persons employed by the Owner/Project Manager, Contractor and its Sub-contractors and Owner's other Contractors and their Sub-contractors in connection with the Work or supply of Goods or Owner/Project Manager and its Contractors and Sub-contractors (whether in the performance of their obligations under the Contract or otherwise) and all other persons who may be affected by the performance of the Work or supply of Goods or any of such persons.

ii)All supplies used in connection with the Relevant Package and all equipments to be incorporated into the Relevant Package, whether in storage on or off the Site under the care, custody or control of Owner/Project Manager, Contractor, any Sub-contractor or Owner's other Contractors and their Sub-contractors.

e) At all times (including during Commissioning, start-up, testing and Initial Operation, and Tests before Take Over including Performance Tests) Contractor shall require all Sub-contractors working on or supplying equipments or construction equipment to the Site to comply with all safety requirements in effect at all such times and of all Applicable Laws and Applicable Permits. Contractor shall, and shall cause the Sub-contractors to, comply with all Applicable Laws and Applicable Permits.
Contractor shall comply with the Owner's/Project Manager's Contract Safety Manual document.

3.22 Affirmative Action:

3.22.1 The Owner recognizes that diversity in the workplace positively impacts business. The Owner commits itself in helping people from SC/ST background either by helping them to become entrepreneurs or by engaging workforce from SC/ST community under the contracts agreed herein. To encourage engaging SC/ST community, the owner may agree to incentivize the Contractor by paying additional 1% of the contract value, if the number of SC/ST workforce engaged in the contract exceeds 30% of the total deployed strength and 2%, if the strength goes beyond 50%. While the Contractor will assist the workforce so engaged to become self-reliant in meeting the work

expectation, the Owner will also volunteer its training resources to the extent possible to improve their employability.
The Contractor shall maintain the proper documentation of such category of the workforce engaged and the owner shall pay the incentive after its verification.

4. INSURANCE

4.1 Rented Equipment

All construction equipment shall be brought to and kept at the Site at the sole cost, risk and expense of Contractor, and OWNER/PROJECT MANAGER shall not be liable for any loss or damage thereto, except to the extent any such loss or damage is caused solely by the OWNER/PROJECT MANAGER. Contractor shall maintain adequate, appropriate and prudent insurance with respect to such construction equipment.

Any Insurance policy carried by the Contractor, any Sub-contractor or any third party on or in respect of any construction equipment shall provide for waiver of the underwriter's right to subrogation against OWNER/PROJECT MANAGER, the Financing parties, their assignees, subsidiaries, parent companies, affiliates, employees, insurers and underwriters. Contractor shall obtain adequate insurance to cover all construction equipment rented or leased from third parties.

4.2 Statutory Insurance Benefits

Contractor shall maintain with respect to the Work to be done under the Contract, in each applicable jurisdiction, all statutory insurance benefits and other insurance required by law including, without limitation, unemployment Insurance.

4.3 Third Party Insurance

Contractor shall at its sole expense, in the joint names of OWNER/PROJECT MANAGER and Contractor prior to the commencement of any Work on the Site, pursuant to the Contract, obtain adequate insurance, against liability for damage or death of or personal injury occurring before Final Performance Acceptance to any Person (including any employee of the insured parties) or to any property due to or arising out of the performance or non performance of the Work by Contractor or any Sub-contractors and other third party liabilities on account of obstruction, loss of amenity, trespass, nuisance or advertising pursuant to the Contract.

4.4 Automobile Liability Insurance

Contractor shall, at its sole expense and in the joint names of OWNER/PROJECT MANAGER and Contractor, shall maintain automobile liability insurance covering all owned, non-owned and hired automobiles, trucks and other vehicles used by Contractor or its Subcontractors in connection with the Work.

4.5 Insurance against Accident, etc. to Workmen and Other Insurances

Contractor shall, at its sole expense, insure and shall maintain Insurance as required by Indian and all other Applicable Laws for all actions, suits, claims, demands, costs, charges and expenses arising in connection with the death of or injury to any person employed by Contractor or its Subcontractors for the purpose of the performance of the Work. Contractor shall also maintain Contractor's All Risk (CAR) insurance.

In addition, Contractor shall obtain and maintain all other Insurances required to be obtained and maintained by it for fulfilling all his obligations under the Contract including Insurances against damages to designs and the like arising out of Services.

4.6 General Insurance Requirements

All insurance obtained by Contractor shall be maintained with an insurer approved by the OWNER/PROJECT MANAGER.

On or prior to the Commencement Date of Contract, Contractor shall furnish to the Financing Parties and OWNER/PROJECT MANAGER certificates of Insurance (or if one of the Financing parties, OWNER/PROJECT MANAGER or OWNER's Representative so directs, copies of the actual insurance policies signed by an authorised Representative of the insurer) from each Insurance carrier showing that the above required Insurance is in force, the amount of the carrier's liability there under, and further providing that the Insurance will not be cancelled, changed or not renewed until the expiration of at least 90 (ninety) Days (to the extent obtainable under commercially reasonable terms) after written notice of such cancellation, change or non-renewal has been received by OWNER / PROJECT MANAGER and the Financing Parties and Contractor. All policies and certificates of Insurance affected in accordance with this clause shall be in form and content acceptable to OWNER/PROJECT MANAGER and Financing Parties.

4.7 Remedy on Failure to Insure

If Contractor fails to effect and keep in force the Insurance for which it is responsible under the Contract, OWNER/PROJECT MANAGER may effect and keep in force any such Insurance, and pay such premiums as may be necessary for that purpose, and from time to time, after issuance of a reimbursement request thereof accompanied by relevant supporting documentation, deduct the amount so paid by OWNER/PROJECT MANAGER from any amounts due or which may become due to the Contractor under the Contract.

4.8 Descriptions not Limitations

The Insurance coverage referred to in this clause no. 4.0 shall be set forth in full in the respective policy forms, and the foregoing descriptions of such policies are not intended to be complete, nor to alter or amend any provision of the actual policies and in matters, if any, in which the said description may be conflicting with such instruments, the provisions of the policies of the Insurance mutually agreed by the Parties shall govern; provided, however, that neither the content of any Insurance policy or certificate nor OWNER/PROJECT MANAGER's approval thereof shall relieve the Contractor of any of its obligations under the Contract.

4.9 Fire Insurance

Unless otherwise instructed by the OWNER/PROJECT MANAGER, the Contractor shall on signing the Contract insure the works and keep them insured until the completion of the Contract against loss or damage by fire with a company to be approved by the OWNER/PROJECT MANAGER, in the joint names of the OWNER/PROJECT MANAGER and the Contractor for such amount and for any further sum if called upon to do so by the OWNER/PROJECT MANAGER, the premium of such further sum being allowed to the Contractor as an authorised extra. Such policy shall cover the property of the OWNER/PROJECT MANAGER only and shall not cover any property of the Contractor or of any of his approved Sub- Contractor or employees. The Contractor shall deposit the policy and receipts for the premiums with the OWNER/PROJECT MANAGER within twenty-one days from the date of signing the Contract unless otherwise instructed by the OWNER/PROJECT MANAGER. In default of the Contractor not insuring as provided above, the OWNER/PROJECT MANAGER /OWNER'S Representative on his behalf may so insure and may deduct the premiums paid from any money due, or which may become due to the Contractor. The Contractor shall, as soon as the claim under the policy is settled, or the work reinstated by the Insurance Office should they elect to do so, proceed with all due diligence with the completion of the works in the same manner as though the fire had not occurred and in all respects under the same conditions of Contract. The Contractor, in case of rebuilding or reinstatement after fire, shall be entitled to such extension of time for completion, as the OWNER/PROJECT MANAGER may deem fit.

Notwithstanding the above, the Contractor shall provide adequate portable fire extinguishers in his work area and take all adequate precautions against fire hazard and train regularly his supervisors/workmen in fire fighting techniques.

In the event of occurrence of any fire being attributable in the opinion of the OWNER/PROJECT MANAGER /OWNER'S Representative to the Contractor's negligence, no extension of time will be granted.

4.10 Damages to Persons & Property Insurance in Respect of

4.10.1 The CONTRACTOR shall be responsible for all injury to persons, animals or things, and for all damage to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any of his approved SUB-CONTRACTOR or of any of his or his approved SUB-CONTRACTOR's employees, whether such injury or damage arises from carelessness, accident or any other cause whatever in any way connected with the carrying out of this Contract. The CONTRACTOR shall indemnify the OWNER/PROJECT MANAGER and hold him harmless in respect of all and any losses arising from any such injury or damage to person or property as aforesaid and also in respect of injury or damage under any applicable laws and also in respect of any award of compensation or damages consequent upon a claim in relation to such injury by a third party.
The Contractor shall have to cover personal third party insurance as per labour law/statuary requirements/applicable laws of state Government per person per incident. Third party

insurance for damage to surrounding property shall be maintained by the Contractor per labour law/statuary requirements/applicable laws of state Government

4.10.2 The CONTRACTOR shall reinstate at his cost all damages of every sort mentioned in this clause, so as to deliver the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

4.10.3 The CONTRACTOR shall indemnify the OWNER/PROJECT MANAGER against all claims which may be made against the OWNER/PROJECT MANAGER by any member of the public, or other third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense arrange to effect and maintain, until the completion of the Contract with an approved nationalised insurance company, a Policy of Insurance in the joint names of the OWNER/PROJECT MANAGER and the CONTRACTOR against such risks and deposit such policy or policies with the ENGINEER from time to time during the currency of this Contract. The CONTRACTOR shall also indemnify the OWNER/PROJECT MANAGER against all claims which may be made upon the OWNER/PROJECT MANAGER, whether under the Workmen's Compensation Act or any other Statute in force during the currency of this Contract or at common law in respect of any employee of the CONTRACTOR or any of his approved SUB-CONTRACTOR and shall at his own expense effect and maintain, until the completion of the Contract, with an approved nationalised insurance company, a Policy of Insurance in the joint names of the OWNER/PROJECT MANAGER and the CONTRACTOR against such risks and deposit such Policy or Policies with the ENGINEER from time to time during the currency of this Contract.

The CONTRACTOR shall be responsible and liable to the Owner for all losses, which may be excluded from the Insurance Policies above referred to and also for all other damage to any property arising out of or incidental to the negligent or defective carrying out of this Contract.

4.10.4 The CONTRACTOR shall also indemnify the OWNER/PROJECT MANAGER in respect of any costs, charges or expenses arising out of any claim or proceedings and also in respect of any award of compensation of damage arising on account of the above.

4.10.5 The OWNER/PROJECT MANAGER/ENGINEER shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and expenses arising or accruing from or in respect of any such claim or damage from any sum due or to become due to the CONTRACTOR.

4.10.6 The OWNER/PROJECT MANAGER and/or ENGINEER shall not be responsible or be held liable for any damage to person or property consequent upon use, misuse or failure of any construction tools and equipment used by the CONTRACTOR or any of his SUB-CONTRACTORS even though such construction tools and equipment be furnished, rented or loaned to the CONTRACTOR or his SUB-CONTRACTORS by the OWNER/PROJECT MANAGER. The acceptance and/or use of any construction tools and equipment by the CONTRACTOR or his SUB-CONTRACTORS shall be construed to mean that the CONTRACTOR accepts all responsibility for and agrees to indemnify

and save harmless, the OWNER/PROJECT MANAGER and/or the ENGINEER from any and all claims for said damages resulting from said use, misuse or failure of such construction tools and equipment for which the OWNER/PROJECT MANAGER may be liable.

5. FOSSILS, INSPECTION & TESTING

5.1 All fossils, coins, articles of value or antiquity, human remains and structures and other remains or things of geological or archaeological or religious or artistic interest or monetary value discovered on the Site shall be the property of the OWNER/PROJECT MANAGER, except as required under applicable law. The Contractor shall take reasonable precautions to prevent his staff, labour or other persons from removing or damaging any such article or thing. The Contractor shall, immediately upon discovery of such article or thing, advice the OWNER/PROJECT MANAGER or OWNER's Representative

5.2 Inspection and Testing

5.2.1 Contractor shall perform all inspection, expediting and quality surveillance as may be required for performance of the Services. Contractor's responsibilities under this sub-clause shall include, without limitation, inspecting all supplies, Materials and equipment that comprise or will comprise the Relevant Package or that are to be used in performance of the Works.

5.2.2 The Contractor shall at its own expense carry out at the place of manufacture and/or on the site carry out all such tests &/or inspections of the plant & equipment and any part of the facilities as are specified in the contract. The Contractor shall carry out the inspection and quality control aspects as set out in Technical Specification. In the event the Owner/Project Manager establishes that the Contractor is not carrying out all such inspection and quality control aspects, the Owner/Project Manager has the right to appoint at Contractor's cost third party inspection agencies.

5.2.3 The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Owner/Project Manager (or their designated representatives) to attend the test and/or inspection. Contractor / Contractor's third party inspection agency shall perform such detailed inspection of all work in progress at intervals appropriate to the stage of design, engineering, procurement, fabrication, construction, erection, testing, Commissioning, start-up or Tests before Provisional Acceptance as is necessary to ensure that such work is proceeding in accordance with the Contract, the Documents, Applicable Laws, Applicable Permits, Good Engineering Practices and Prudent Electricity Industry Practice and to protect Owner/Project Manager against defects and deficiencies in such work (including any which would diminish or void the ability of Owner/Project Manager or Contractor to realise upon any manufacturer's or supplier's warranty or under any applicable insurance coverage). On the basis of such inspections, Contractor shall keep Owner/Project Manager continuously informed of the progress and quality of all work, whether performed by Contractor or any Sub-contractor, and shall provide Owner/Project Manager with Written reports which shall contain notwithstanding anything to the contrary contained herein defects and deficiencies revealed through such inspections and of measures proposed by Contractor to remedy such defects and deficiencies. Owner/Project Manager or Owner's Representative shall have the

option, at Owner's /Project Manager's expense, of being present at all such inspections, and the Contractor shall give notice of all such inspections agreed.

5.2.4 In the event that the progress and quality of the work is not proceeding in accordance with the Contract, Owner/Project Manager or Owner's Representative shall be entitled to make recommendations to Contractor or any Sub-contractor for the purpose of remedying such failure and any such defects and deficiencies or variances. Any inspection performed or not performed by Owner/Project Manager hereunder shall not be a waiver of any of Contractor's obligations under the Contract or be construed as an approval or acceptance of any of the work or Services hereunder or absolve the Contractor in any manner of its liabilities, responsibilities and obligations under the Contract.

5.2.5 The Contractor shall, where required give due notice to the Owner/Project Manager/Owner's Representative whenever such work is ready before covering up or putting out of view. The Owner's Representative shall then either carry out the inspection, examination, measurement or testing or notify the Contractor that it is considered unnecessary.

5.2.6 The Owner's Representative shall have the right to re-inspect any work though previously inspected and approved by him at the Site, before and after the same are erected. If by the above inspection the Owner's Representative rejects any work, the Contractor shall make good for such rejections either by replacement or modifications/ repairs as may be necessary to the satisfaction of the Owner's Representative.

5.2.7 The Owner/Project Manager and the Owner's Representative shall be entitled, during design, engineering, manufacture, fabrication and preparation at any places where work is being carried out, to inspect, examine and test the materials and workmanship, and to check the progress in the performance of the work at no extra cost to the Owner/Project Manager. The Contractor shall give all reasonable facilities and assistance, including access to Documents to carry out such inspection, examination, measurement and testing. All inspection and tests shall be in line with approved Inspection & Test Plans and Owner/Project Manager/Owner's Representative shall carry out necessary inspection as per the Contract. Should any inspected work or service fail to conform to the Contract, the Owner/Project Manager may reject such work or service and the Contractor shall either replace or make alterations necessary to meet Contract requirements free of cost to the Owner/Project Manager. The Owner/Project Manager's right to inspect, test, and where necessary, reject the work or service shall in no way be limited or waived by reason of any part of the work having previously been inspected, tested and passed by the Owner/Project Manager or Owner's Representative.

5.2.8 The Contractor shall agree, with the Owner/Project Manager/Owner's Representative about the time and place for the testing of any equipment / Materials and other parts of the Works as specified in the Contract. The Contractor shall give 15(fifteen) Days notice for inspection of indigenous Materials and 30(thirty) days for Offshore Materials. The Owner/Project Manager/Owner's Representative shall give the Contractor not less than 24 (twenty four) hours'

notice of his intention to attend the Tests. The Contractor shall provide sufficient suitably qualified and experienced staff to carry out the Tests specified in the Contract. The Contractor shall present to the Owner/Project Manager/Owner's Representative the calibration certificates of all the testing and measuring instruments proposed to be used for carrying out the Tests. In case the Owner/Project Manager/Owner's Representative is not satisfied with the calibration certificates, the Contractor shall arrange to get the concerned instrument(s) recalibrated to the satisfaction of the Owner/Project Manager/Owner's Representative.

5.2.9 If the Owner's Representative does not attend at the time and place agreed, or if the Contractor and the Owner's Representative agree that the Owner's Representative shall not attend, the Contractor may proceed with the Tests, unless the Owner's Representative instructs the Contractor otherwise. Participation by Owner/Project Manager or Owner's Representative in or their absence from or failure to participate in any Tests (other than the Performance Tests) shall not relieve or absolve the Contractor from any Guarantee or Warranty or obligations of Services under or in pursuance of the Contract.

5.2.10 The Contractor shall promptly forward to the Owner/Project Manager/Owner's Representative duly certified reports of the Tests.

5.2.11 If the Owner/Project Manager/Owner's Representative requires such equipment, materials, design or workmanship to be re-tested, the Tests shall be repeated under the same terms and conditions. Contractor shall undertake an additional testing of any material, equipment or the work, if the Owner/Project Manager/Owner's Representative believes the results of earlier Tests are not accurate or do not establish the true condition to specification of equipment, material or work being tested. If such retesting demonstrate that the work, equipment or material being so tested conforms to the requirements of Contract, then Owner/Project Manager shall bear the cost of such additional Test and the cost of any required uncovering and covering the Goods or Services and shall grant the extension of time for completion, if necessary. If however such retesting confirms Owner/Project Manager/Project Manager's conclusion and cause the Owner/Project Manager to incur additional costs, such costs shall be recoverable from the Contractor by the Owner/Project Manager and may be deducted by the Owner/Project Manager from any monies due, or to become due, to the Contractor. Neither the failure by Owner/Project Manager/Owner's Representative to discover defects, nor any payment to Contractor in respect of the Tests, shall prejudice the rights of Owner/Project Manager thereafter to require and obtain from Contractor the performance of the Services in accordance with the Contract herewith. Owner/Project Manager/Project Manager shall not be deemed to have accepted any Services as a result of any additional testing.

5.3 Rejection

If, as a result of inspection, examination or testing, the Owner/Project Manager/Owner's Representative decides that any works, equipment, system, materials, design or workmanship has failed in such inspection, examination or tests or is defective or otherwise not in accordance with the Contract, the Owner's Representative may reject such Works, equipment, system,

materials, design or workmanship and shall notify the Contractor promptly, stating his reasons. The Contractor shall then promptly correct or replace, such item or portion so as to pass retesting and otherwise meet and conform to such requirements. Following any such rejection, all expenses reasonably incurred by the Owner/Project Manager in consequence of such re-testing or inspection shall be borne by the Contractor. No changes to project schedule or increase in the contract price shall be granted with respect to such additional testing. Contractor shall solely bear any cost resulting there from.

6. DELAY AND EXTENSIONS OF TIME

6.1 The time allowed for carrying out the work as mentioned in the Contract shall be strictly observed by the Contractor.

6.2 The Contractor agrees that the work shall be commenced and carried on at such points and in the order of precedence and at such times and seasons as may be directed by the OWNER/PROJECT MANAGER in accordance with the schedule for completion of the work as outlined elsewhere in the Contract. The Contractor declares that he has familiarised himself with the site and rights-of-way, with all the local conditions, and with all the circumstances which may, or are likely to affect the performance and completion of the work, and that he has allowed for such conditions. However, if a time schedule is submitted by the Contractor so as to keep the phasing of work generally in line with the time schedule drawn up and to keep the components unchanged, such time schedule after approval from the OWNER/PROJECT MANAGER, shall be accepted and complied with by the Contractor and it shall form a part of the Contract. The progress of work will be checked at regular monthly intervals and the percentage progress achieved should be commensurate with the time elapsed after the award of the Contract.

6.3 If the Contractor shall desire an extension of time for completion of work on the grounds of his having been unavoidably hindered in its execution or any other ground, he shall apply in writing to the OWNER/PROJECT MANAGER within 7 days of the date of hindrance on account of which he desires such extension as aforesaid. This application shall invariably be accompanied by sufficient documentation giving reasons for seeking such extension. No application for such extension shall be entertained if it is not received in sufficient time to allow the OWNER/PROJECT MANAGER to consider it and the Contractor shall be responsible for the consequences arising in relation thereto. Upon receipt, OWNER/PROJECT MANAGER may accept or reject such application.

In the event of a disruption (other than suspension by OWNER/PROJECT MANAGER) to the Schedule and if in the opinion of Contractor it is not the responsibility of Contractor or its any Sub-contractor and which might have been caused due to action of any third parties which CONTRACTOR might not have reasonably prevented, and that Contract entitles Contractor to time extension and / or other relief from OWNER/PROJECT MANAGER, the Contractor shall notify the OWNER/PROJECT MANAGER within twenty four (24) hours and provide a written report (to the best of Contractor's knowledge at the time) of the disruption within 72 (Seventy

Two) Hours of Contractor's learning of the disruption and such report shall be supplemented on a prudent, informative and timely basis thereafter not later than 14 (Fourteen) Days from the date of Contractor's first learning of such disruption. In such an event the Contractor may modify and resubmit for approval to OWNER/PROJECT MANAGER/OWNER's Representative computer based network schedule and modifications if any required to the Schedule. . Upon receipt, OWNER/PROJECT MANAGER shall take reasonable action in accordance with the Contract.

Contractor in any case has to inform to OWNER immediately upon learning of any possible hindrances to the Works which have caused or may cause delay or other impact to the Works to enable OWNER take suitable action.

6.4 No necessity for an extension of time is anticipated but if untoward or extraordinary circumstances beyond the control of the Contractor should arise, which in the opinion of the OWNER/PROJECT MANAGER should entitle the Contractor to a reasonable extension of time, such extension may be granted but shall not operate to release the Contractor from any of his obligations, other than in relation to payment of liquidated damages for such delay (only to the extent of the extension granted by the OWNER / PROJECT MANAGER. For purpose of this clause, untoward and extraordinary circumstances are defined under clause 13.0 hereinafter. Under above circumstances, only extension of time may be granted but the Contractor will not be entitled to any additional compensation. In case of strike or lockout, the Contractor shall, as soon as possible, give written notice to the OWNER/PROJECT MANAGER, but the Contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably be required to the satisfaction of the OWNER/PROJECT MANAGER to proceed with the work.

6.5 The OWNER/PROJECT MANAGER shall have the right to order discontinuance/suspension of the work, in whole or in part, for such time as may be necessary in the opinion of OWNER. In such an event, the OWNER/PROJECT MANAGER will grant such extension of time for completion of the Contract which in its opinion is proper and/or other relief in accordance with Contract in consequence of such delay.

6.5.1 Resumption of Work

After receipt of permission or of instruction to proceed, the Contractor shall, after notice to the OWNER/PROJECT MANAGER, and together with the OWNER's Representative, examine the Works and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Materials, which has occurred during the suspension. The Work after resumption shall be started by the Contractor within 7 (seven) Days of receipt of permission or instruction to proceed.

6.6 Rate of Progress

6.6.1 If, at any time, the Contractor's actual progress falls behind the Schedule in any manner or it becomes apparent that it will so fall behind, the Contractor shall submit to the OWNER/PROJECT MANAGER / OWNER's Representative a revised programme taking into account the prevailing circumstances. The Contractor shall, at the same time, notify the OWNER/PROJECT MANAGER / OWNER's Representative of the steps being taken to expedite progress, so as to achieve completion within the time for completion stipulated under the Contract, including in particular the Schedule and the Guaranteed Completion Dates. The Contractor may also be asked to modify the plan, as a result of the changed circumstances due to delay, in order to complete the Work in time.

6.6.2 If any steps taken by the Contractor in meeting his obligations under this sub clause no. 6.6 cause the OWNER/PROJECT MANAGER to incur any additional costs, such costs shall be recoverable from the Contractor by the OWNER/PROJECT MANAGER, and may be deducted by the OWNER/PROJECT MANAGER from any monies due, or that may become due, to the Contractor under the Contract or otherwise.

6.7 Non Performance by Contractor

6.7.1 If the CONTRACTOR, except on account of any legal restraint upon the OWNER/PROJECT MANAGER, is preventing the continuance of the work or in case of a certificate for interim payment not paid within the period for honouring certificate, shall suspend the works or in the opinion of the ENGINEER shall neglect or fail to proceed with due diligence in the performance of his part of the Contract or if he shall more than once make default in respect of Scope of Contract, the OWNER/PROJECT MANAGER and/or the ENGINEER shall have the power to give notice in writing to the CONTRACTOR requiring that the work be proceeded within a reasonable manner and with reasonable dispatch, such notice shall purport to be a notice under this clause. After such notice shall have been given, the CONTRACTOR shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials belonging to him which shall have been placed thereon for the purpose of the works and the OWNER/PROJECT MANAGER shall have a lien upon all such plant and materials to subsist from the date of such notice being given until the notice shall have been compiled with. If the CONTRACTOR shall fail for 7 days after such notice has been given to proceed with the works as therein prescribed, the OWNER/PROJECT MANAGER may proceed as provided in Clause 11.0 hereinafter.

6.7.2 If the CONTRACTOR fails to perform as per the expectations of the OWNER/PROJECT MANAGER and consistently fails to achieve intermediate milestones as mentioned in the contract or fails to proceed with due diligence in the performance of his part of the contract or fails to make such due progress as would enable the works to be completed within period agreed, then in addition to the action proposed in clause 11 hereinafter, the OWNER/PROJECT MANAGER shall take recourse to the following (as per clause 6.7.3) :

6.7.3 After giving 7 days notice of non-performance to the CONTRACTOR, as per clause 11 hereinafter, the OWNER/PROJECT MANAGER shall be at liberty to remove items or part of the scope of the works of this contract and get the same executed by third party at the CONTRACTOR's risk and cost. The OWNER/PROJECT MANAGER has the right to recover the cost difference between the actual amount spent by the OWNER/PROJECT MANAGER in getting these works executed by third party and the amount that would have been payable to the CONTRACTOR at the quoted rates of this contract.

7. CERTIFICATE OF COMPLETION

7.1 Certificate of Virtual Completion

Upon successful provisional takeover of the Works as per the criteria defined in Special conditions of Contract, the OWNER/PROJECT MANAGER shall issue certificate of virtual completion to the Contractor.

7.2 Certificate of Completion

Upon successful final takeover of the Works as per the criteria defined in Special conditions of Contract, the OWNER/PROJECT MANAGER shall issue "Certificate of completion" or "Completion certificate" to the Contractor for the Works under this Contract. Defect liability period and warranties shall commence from the date of issuance of this certificate of completion.

8. LIQUIDATED DAMAGES

8.1 Liquidated Damages

Liquidated Damages shall be as per Special Conditions of Contract

9. WARRANTIES

9.1 Contractor Warranties

Contractor warrants to OWNER/PROJECT MANAGER with respect to the Performance of Work that all construction equipment and materials comprising the Contract Works will be new, conforming to Technical Specifications and free from defective workmanship. If OWNER/PROJECT MANAGER notifies Contractor in Writing with adequate detail of any such defects or deficiencies in the Works discovered during the applicable Warranty Period thereof, Contractor shall (a) re-perform any of the work hereunder to correct any errors, omissions, defects or deficiencies in the Works, and (b) in the case of any defective equipment or materials, at Contractor's option either repair or replace at its Cost.

9.2 Warranty Period

9.2.1 The Warranty Period for various items/systems shall be shall be as per Technical Specifications or as per standard industry practice in the event it is not specified in Technical specifications.

9.2.2 To Remedy Defective Work and Defect Liability Period

If the work or any portion thereof shall be damaged in any way excepting by the acts of the OWNER/PROJECT MANAGER, or if defects not readily detected by proper inspection shall develop before the final completion and acceptance of the whole work, the Contractor shall forthwith make good, without compensation from the OWNER / PROJECT MANAGER, such damage or defects in a manner satisfactory to the OWNER/PROJECT MANAGER / OWNER's Representative. In no case shall defective or imperfect work be retained.

Duration of defect liability period shall be as stated in Special Conditions of Contract. In case any defects in the work due to bad materials and/or bad workmanship develop in the work before the expiry of this period, the Contractor on notification by the OWNER/PROJECT MANAGER shall rectify or remedy the defects at his own cost and he shall make his own arrangements to provide materials, labour, equipment and any other appliance required in this regard. The retention of Security Deposit/Performance Bank Guarantee by the OWNER/PROJECT MANAGER during this Defects Liability Period shall be as indicated in Special Conditions of Contract. In case even on due notification by the OWNER/PROJECT MANAGER, the Contractor fails to rectify or remedy the defects, the OWNER/PROJECT MANAGER shall have the right to get this done by other agencies and recover the cost incurred, by deductions from any money due or that may become due to the Contractor or from his security deposit/ Performance Bank Guarantee.

The OWNER/PROJECT MANAGER may, in lieu of such amending and making good by the Contractor, deduct from any money due to the Contractor or from his security deposit Performance Bank Guarantee, a sum to be determined by the OWNER/PROJECT MANAGER equivalent to the cost of amending such work and in the event of such security deposit/ Performance Bank Guarantee being insufficient, recover the balance from the Contractor together with any expense the OWNER/PROJECT MANAGER may have incurred in connection therewith.

The Contractor shall remain liable under the provisions of this clause notwithstanding the passing by the OWNER/PROJECT MANAGER of any certificate, final or otherwise or the passing of any accounts.

10. INTERIM AND FINAL PAYMENTS

10.1 The Contractor’s organisation shall maintain an independent estimate & billing division. Contractor shall be responsible for working out the detailed quantities for various items of work, from the progressive drawings, released for construction, within two months from the date of receipt of drawings. Detailed bill of quantities along with the abstract shall be submitted to the Engineer for his approval. Increase or decrease in these approved quantities due to revision in drawings or due to Engineer’s instructions shall be incorporated by the Contractor and submitted to the Engineer for revised approval within 30 days from the receipt of revised drawings/instructions.

10.2 Bills are to be submitted in the format approved by the Owner/Engineer. Interim / Final bills shall be submitted on the basis of work completed against these approved quantities. Payment will be released by the Owner on verification of work completed against these approved

quantities. No other method for billing shall be accepted by the Owner. Each bill shall be submitted along with the detailed measurement sheets, pour cards, reconciliation statements for all the materials issued by the Owner.

10.3 R.A bill shall be monthly and in computerised format prepared in Microsoft-EXCEL. The bills shall be error free and accompany all the supporting documents like JMRs, quality related documents, pour card, etc. The bill shall be submitted in soft copy (non-rewritable CDs) also.

10.4 Any interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and shall not preclude the right of OWNER/ ENGINEER from getting bad, unsound and imperfect or unskilled work to be removed and reconstructed by the CONTRACTOR or be considered as an admission of the due performance of the Contract or any part thereof in any respect or the accruing of any claim nor shall it conclude, determine or affect in any way the powers of OWNER/ENGINEER under these conditions or any of them as to the final settlement and adjustment of the payment or otherwise, or in any other way vary or affect the Contract.

10.5 A bill shall be submitted by the CONTRACTOR each month on or before the date fixed by the OWNER for all works executed in the previous month and OWNER shall take or cause to be taken the requisite measurement for the purpose of having the same verified. If the CONTRACTOR does not submit the bill within the time fixed as aforesaid, the ENGINEER at its discretion may depute within seven days of the date fixed as aforesaid a subordinate to measure the said work in the presence of the CONTRACTOR whose counter signature to the measurement list will be sufficient warrant and the ENGINEER may prepare a bill from such list which shall be binding on the CONTRACTOR in all respects. If the CONTRACTOR fails to countersign or to record the differences within a week from the date of measurement in the manner required by the ENGINEER then in any such event, the measurements taken by the ENGINEER or by the subordinate deputed by him as the case may be, shall be final and binding on the CONTRACTOR and the CONTRACTOR shall have no right to dispute the same.

10.6 The final bill shall be submitted by the CONTRACTOR within two months of the date of the certificate of completion furnished by the ENGINEER, otherwise the ENGINEER'S certificate of the measurement and the total amount payable for the work accordingly shall be final and binding on all parties.

10.7 The CONTRACTOR shall submit all bills in printed forms and the charges in the bills shall always be entered at the agreed rates as per the Contract or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the Contract at the rates subsequently accepted by the OWNER for such work.

10.8 In case work is nearly or is anticipated to be suspended, or in case only unimportant progress is being made, or in case it is apparent that the CONTRACTOR is about to forfeit his Contract or that the money yet due to him will not complete his Contract, the ENGINEER may, at his discretion, withhold any payment which may be due to the CONTRACTOR.

10.9 The CONTRACTOR shall not demand, nor be entitled to receive payment for the work any portion thereof except, in the manner set forth in this Contract and only after the ENGINEER shall have given a certificate for such payment. For final payment, when the work covered by this Contract has been completed, and Completion certificate has been issued to the Contractor, the CONTRACTOR shall prepare a final abstract showing the total amount of work done and its value under and according to the terms of this Contract. The CONTRACTOR shall attach copies of the ENGINEER's completion certificate with his final abstract. From the total value thus arrived, all previous payments will be deducted and all deductions made in accordance with the provisions of this Contract and the remainder shall be paid by the OWNER to the CONTRACTOR within three months of the date of submission of the CONTRACTOR's final bill except in case of disputed items.

10.10 Deduction from / Withholding Contractor's Bills/Payment

10.10.1 All costs, damages or expenses, which the Owner/Project Manager may have paid, for which under the Contract the Contractor is liable, will be claimed by the Owner/Project Manager. All such claims shall be billed by the Owner/Project Manager to the Contractor regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the Contractor properly identify such claims. Such claims shall be paid by the Contractor within 15 (fifteen) Days of the receipt of the corresponding bills and if not paid by the Contractor within the said period, the Owner/Project Manager may the deduct the amount, from any monies due or becoming due by him to the Contractor under the Contract or may be recovered by actions of Law or otherwise, if the Contractor fails to satisfy the Owner/Project Manager of such claims.

10.10.2 Owner/Project Manager shall have the right to withhold from any payment due to Contractor, including the final payment, such amounts as Owner/Project Manager reasonably deems necessary or appropriate to protect it because of any one or more of the following reasons:

a. Defects in any Work, which might affect Owner/Project Manager's ability to operate Relevant Package as contemplated herein, whether or not payment has been made thereof;

b. The filing of any vendor / tradesman's lien or similar encumbrance in respect of the Work or the Relevant Package (or any portion thereof);

c. A dispute as to the accuracy or completeness of any request for payment received by Owner/Project Manager within 90 Days of receipt thereof or payment made there under;

d. Contractor's failure to deliver any Performance Securities to Owner/Project Manager

e. Any requirement in accordance with Applicable Laws to withhold any Taxes payable by Contractor in respect of the Goods/Work or any part thereof;

f. Contractor's failure to make payments to its Sub-contractors or Workers for Work or supply of Goods or to any statutory & Regulatory authority including amounts withheld by Contractor because of disputes between Contractor and such Persons.

g. Any legal cases, litigations pending against the Contractor or against the Owner/Project Manager but relating to the Works or Contractor's obligations under the Contract.

h. Any breach of the Contract by the Contractor.

10.10.3 In addition to the provisions of the clause No.10.10.1 which relates to the recovery by the Owner/Project Manager of any amounts that the Owner/Project Manager may have paid, for which the Contractor is liable under the Contract, the Owner/Project Manager shall also be entitled to recover all the dues in terms of the Contract including Liquidated Damages for delay, Liquidated Damages for the shortfall in the guaranteed performance parameters, etc., by way of deductions from the payments due to the Contractor or that may become due to the Contractor in future or from any securities / guarantees under the Contract and / or otherwise.

10.10.4 Notwithstanding any dispute that Contractor may have, and regardless of the basis thereof or grounds thereof, Contractor agrees that it will, for so long as the Contract has not been terminated diligently proceed with the Works up to Final Performance Acceptance and final Take-over of Relevant Package, all in accordance with the terms of the Contract.

10.10.5 Any payment due to Owner/Project Manager by the Contractor and remaining unpaid beyond the stipulated date shall be liable to interest payment at the rate of 1(one) percentage point above the short term Prime Lending Rate of State Bank of India from the date of due to Owner/Project Manager to the date of receipt of dues from Contractor by Owner/Project Manager.

10.10.6 Idle time charges for any reason whatsoever shall not be borne by the OWNER.

10.11 Punch List Items:

Contractor shall perform all Work required or appropriate for all Punch List Items within a Schedule to be mutually determined by Contractor and Owner/Project Manager after submission of the Final Request for takeover. Such Schedule shall provide for completion of all Punch List Items as soon as practicable following determination of the completion schedule, but no later than the date set forth by Owner/Project Manager. Upon completion of the Punch List Items, Contractor may submit to Owner/Project Manager and the Owner's Representative a Request for Final Takeover and shall furnish with such a request a certificate that all Punch List Items have been completed. OWNER/PROJECT MANAGER shall examine and certify claim of Contractor of having satisfactorily attended the punch list items.

10.12 Change Orders

A Change Order shall be issued by the Owner/Project Manager in accordance with this clause, when either Owner/Project Manager or Contractor proposes to make any change in the Scope, Services, the Contract Price, the Performance Guarantees and/or the Schedule.

10.12.1 Further Detailing not a Change Order

Contractor's performance of Services shall be subject to further detailing from time to time and Contractor shall receive no additional compensation for such detailing to the extent that such detailing does not constitute a Change Order.
Notwithstanding GCC, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.

10.12.2 Right to Change Order

Change Orders may be initiated by the Owner/Project Manager/Owner's Representative at any time during the Contract Period, either by instruction or by a request (the "Change Order Notice") to the Contractor to submit a proposal. If the Owner/Project Manager/Owner's Representative requests the Contractor to submit a proposal and subsequently elects not to proceed with the change, the Contractor shall not be reimbursed for the Cost incurred for proposal.
The Contractor shall not make any alteration and/or modification of the Services unless and until the Owner/Project Manager/Owner's Representative instructs or approves a Change Order in Writing.
Change Orders may be requested by the Contractor (the "Change Order Request") (i) in case its performance of Services is affected by any Change in Laws or any act or omission of the Owner/Project Manager, Owner's Representative or Owner/Project Manager's Other contractors, or (ii) to propose any change which in the Contractor's opinion will reduce the cost of constructing, maintaining or operating the Relevant Package or otherwise be of benefit to the Owner/Project Manager.

10.12.3 Change Order Procedure

If the Owner/Project Manager/Owner's Representative issues a Change Order Notice, the Contractor shall submit a proposal addressing the following, within fifteen (15) Days or any other period as mutually agreed:

a) Description of the proposed design and/or work to be performed, and a programme for its execution together with supporting details and calculations;

b) The Contractor's proposal for any necessary modifications to the Schedule

c) The Contractor's proposal for any adjustment to the Contract Price, Guaranteed Completion Dates, Performance Guarantees and/or modifications to the Contract.

10.12.4 If the Contractor issues a Change Order Request, the Contractor shall submit a proposal addressing the following:

a) the reasons for the request with supporting details / documents;

b) a description of the design and/or work affected or proposed to be performed, together with programme for execution and other supporting details / calculations;

c) the Contractor's proposal for any necessary modifications to the Schedule;

d) the Contractor's proposal for any adjustment to the Contract Price, Guaranteed Completion Dates, Performance Guarantees and/or modifications to the Contract.

10.12.5 The Owner/Project Manager/Owner's Representative shall respond with approval, rejection or comments within a period to be mutually agreed after receipt of such proposals.

10.12.6 If the Owner/Project Manager/Owner's Representative instructs or approves in Writing a Change Order, the parties shall proceed with adjustments to the Contract Price, Schedule of Payments, Performance Guarantees and/or Guaranteed Time for Completion.

10.12.7 Contractor shall not suspend performance of this Contract during review and negotiation of any Change Order, except as may be directed by Owner/Project Manager or required by Applicable Law.

10.12.8 Payment in respect of the approved Change Orders shall be released by the Owner/Project Manager to the Contractor on satisfactory completion of such Change Order and its certification by the Owner's Representative in the same manner as applicable to corresponding milestone payments under the Contract.

10.13 WORK PARTLY ABANDONED

10.13.1 If any time after commencement of the work, the OWNER shall for any reason whatsoever, not require the Partly work thereof as specified in the Contract to be carried out, the ENGINEER shall give notice in writing of the fact to the CONTRACTOR who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out nor shall he have any claim for compensation by reason of any change having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated.

10.13.2 The CONTRACTOR shall be paid the charges on the cartage only of materials actually brought to the site by the CONTRACTOR and rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof and taken back by the CONTRACTOR, provided however, that the ENGINEER shall have in all such cases, the right to purchase these materials at their purchase price or at current local rates whichever may be less.

11. TERMINATION BY THE OWNER/PROJECT MANAGER

If the Contractor (being an individual or a firm) commit any 'Act of Insolvency', or shall be adjudged as insolvent, or shall make an assignment or composition for the greater part in number or amount of his creditors, or shall enter into a Deed of Assignment with his creditors, or (being an Incorporated Company) shall have an order made against him or pass an effective

Resolution for winding up either compulsorily or subject to the supervision of the Court or voluntarily, or if the Official Assignee of the Contractor shall repudiate the Contract, or if the Official Assignee or the Liquidator in any such winding up shall be unable, within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the OWNER/PROJECT MANAGER that he is able to carry out and fulfil the Contract and if required by the OWNER/PROJECT MANAGER to give security therefor, or if the Contractor shall sub-contract, assign or sublet the Contract without the consent in writing of the OWNER/PROJECT MANAGER first obtained, or if the Contractor shall charge or encumber this Contract for any payments due or which may become due to the Contractor there under, or if the ENGINEER shall certify in writing to the OWNER/PROJECT MANAGER that in his opinion the Contractor.

i. Has abandoned the Contract, or

ii. Has failed to commence the works, or has, without any lawful excuse under these conditions suspended the progress of the works for fourteen days after receiving from the OWNER/PROJECT MANAGER written notice to proceed, or

iii. Has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or

iv. Has failed to remove materials from the site or to pull down and replace works within seven days after receiving from the OWNER/PROJECT MANAGER written notice that the said materials or work were condemned and rejected by the OWNER/PROJECT MANAGER under these conditions, or

v. Has neglected or failed persistently to observe and perform all or any of the acts, matters or things required by this Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same, or

vi. Has to the detriment of good workmanship or in defiance of the OWNER/PROJECT MANAGER's instructions to the contrary sublet any part of the Contract.

Then and in any of the said causes the OWNER/PROJECT MANAGER with the written consent of the ENGINEER may, notwithstanding any previous waiver, after giving seven days notice in writing to the Contractor, terminate the Contract. Notwithstanding any such termination, the Contractor shall continue to be responsible for all liabilities that have accrued under this Contract prior to the date of such termination. And further, the OWNER/PROJECT MANAGER with the consent of the ENGINEER by his agents or servants may enter upon and take possession of the works and all plant, tools, scaffolding, sheds, machinery, steam and other power, utensil and materials, lying upon premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other Contractor's or other persons or person to complete the works and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the works.

When the work shall be completed, or as soon thereafter as convenient, the ENGINEER shall give a notice in writing to the Contractor to remove his surplus materials and plant and should the Contractor fail to do so within a period of 14 days after receipt thereof by him, the OWNER/PROJECT MANAGER may sell the same by public auction and shall give credit to the Contractor for the amount so realised. The OWNER/PROJECT MANAGER shall thereafter ascertain and certify in writing under his hand what (if anything) shall be due or payable to the Contractor by the OWNER/PROJECT MANAGER, for the value of the said plant and materials so taken possession of by the OWNER/PROJECT MANAGER, and the expense or loss which the OWNER/PROJECT MANAGER shall have been put to in getting the works to be so completed, and the amount, if any owing to the Contractor and the amount which shall be so certified shall, thereupon, be paid by the OWNER/PROJECT MANAGER to the Contractor or by the Contractor to the OWNER/PROJECT MANAGER as the case may be, and the certificate of the OWNER/PROJECT MANAGER shall be final and conclusive between the parties.

12. INDEMNIFICATION

12.1 General Indemnity

12.1.1 Contractor shall fully indemnify, save harmless and defend OWNER/PROJECT MANAGER, OWNER/PROJECT MANAGER's shareholders, the OWNER's Representative, and the directors, agents and employees of the OWNER/PROJECT MANAGER (the "OWNER Indemnified Parties") from and against any and all claims, including reasonable legal costs, (collectively the "Damages"), including by way of claims from third parties in respect of death or bodily injury or in respect to loss or damage to any property (other than the Works,Plant or part thereof not yet taken over) which arises out of or in consequence of the Services whilst the Contractor has responsibility for the care of the works to the extent resulting from Contractor's or any Sub-Contractor's or their agents or employees intentional act, negligence, or strict liability or omission in the performance of the Services hereunder; provided that the foregoing obligation shall not apply to the extent the OWNER Indemnified Parties are contributory negligent or strictly liable or to the extent such damages are caused by the intentional acts or omissions of the OWNER Indemnified Parties.

12.1.2 OWNER/PROJECT MANAGER shall fully indemnify, save harmless and defend Contractor and its shareholders and the directors, agents and employees of the Contractor (the "Contractor Indemnified Parties"), from and against any and all claims, including reasonable legal costs, (collectively the "Damages") by third parties in respect of death or bodily injury or in respect to loss or damage to any property which arises out of or in consequence of the execution of the Project to the extent caused by OWNER/PROJECT MANAGER's or OWNER/PROJECT MANAGER's other contractor's strict liability, intentional act or omissions or negligence; provided that the foregoing obligation shall not apply to the extent the Contractor Indemnified Parties are contributory negligent or strictly liable or to the extent such damages are caused by the intentional acts or omissions of the Contractor Indemnified Parties.

12.2 Specific Indemnification

12.2.1 Contractor shall fully indemnify, save harmless OWNER Indemnified Parties from and against any claim, demand, liability, action, proceedings, cost or expense in favour of any third party with respect to

a) Failure of Contractor, any Sub-Contractor or any of their respective Sub-Contractors to comply with Applicable Laws and Applicable Permits, Prudent Utility Practices and Good Engineering Practices.

b) Failure of Contractor to make payments of taxes relating to Contractor's, any Sub-Contractor's income or other taxes required to be paid by Contractor pursuant to this Contract irrespective of whether they are reimbursable or to be compensated under the terms of this Contract.

c) Any Hazardous Materials Contractor, any Sub-contractor, or any of their respective Sub-Contractors has at any time brought on and caused the release thereof on or from the Site or for which any of them is responsible by law or in the Contract.

d) Material breach by the Contractor of any provision of this Contract.

12.2.2 OWNER/PROJECT MANAGER shall fully indemnify, save harmless and Contractor Indemnified Parties from and against Damages in favour of any third party with respect to:

a) Failure of OWNER/PROJECT MANAGER or any of its Other Contractors to comply with Applicable Laws and Applicable Permits.

b) Any Hazardous Materials of OWNER/PROJECT MANAGER or any of its Other Contractors has brought on and caused the release thereof from the Project Site.

12.3 Intellectual Property Indemnification

12.3.1 In performing the Services, Contractor shall not incorporate into the Relevant Package, or use in connection with the Relevant Package or the performance of the work, any materials, methods, processes, systems or service that involve the use of any confidential information, intellectual property or proprietary rights that Contractor does not have the right to use or incorporate or which may result in claims or suits against Owner/Project Manager, Contractor or any Sub-contractor arising out of claims of infringement of any third party, domestic or foreign patent rights, copyrights, other proprietary rights, or intellectual property rights, licenses or agreements, or applications for any thereof, or rights of use of confidential information.

12.3.2 Contractor shall provide Owner/Project Manager with royalty free license for the sole purpose to operate and maintain the Relevant Package.

12.3.3 Contractor shall fully indemnify and save harmless and defend the Owner Indemnified Parties from and against any and all Damages that the Owner Indemnified Parties may suffer, incur or

pay by reason of any claims or suits arising out of claims of infringement of any patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to equipment, designs, techniques, processes and information designed or used by Contractor or any sub-Contractor in performing the Work or supply of Goods hereunder or under the Sub-Contracts in any way incorporated in or related to the Project other than any such equipment, designs, techniques, processes and information provided by the Owner Indemnified Parties.

12.3.4 If, in any suit or claim relating to the foregoing, a temporary restraining order or preliminary injection is granted, Contractor shall make every effort to secure the suspension of the injunction or restraining order. If, in any such suit or claim or any part, combination or process thereof, is finally held to constitute an infringement and its use is permanently enjoined, Contractor shall promptly make every reasonable effort to secure for Owner/Project Manager a license, at no Cost to Owner/Project Manager, authorising continued use of the infringing Goods or Work. If Contractor is unable to secure such license within a reasonable time so as to not affect the project completion schedule, Contractor shall, at its own expense and without impairing performance requirements, either replace the affected Goods or Work, or part, combination or process thereof with non-infringing components or parts or modify the same so that they become non-infringing.

12.3.5 Final payment to the Contractor by the Owner/Project Manager will not be made while any such suit or claim remains unsettled.

12.4 Notice and Legal Defence

12.4.1 Promptly after receipt by a party of any claim or Notice of the commencement of any action, administrative or legal proceeding, or investigation as to which the indemnities provided may apply, such Party shall notify the other Party in Writing of such fact provided that the failure of a Party to give any such Notice promptly shall not excuse the indemnifying party from its indemnification obligations hereunder except to the extent any such failure actually prejudices the indemnifying Party in the defence of such matters.

12.4.2 The indemnifying Party shall assume on behalf of the indemnified Party and conduct with due diligence and in good faith the defence thereof with counsel reasonably satisfactory to the indemnified Party; provided that the indemnified Party shall have the right to be represented therein by advisory counsel of its own selection and at its own expense; and provided, further, that if the defendants in any such action include both the indemnifying Party and the indemnified Party and the indemnified Party shall have reasonably concluded that there may be legal defences available to it which are different from or additional to, or inconsistent with, those available to the indemnifying Party, the indemnified Party shall have the right to select separate counsel to participate in the defence of such action on its own behalf at the indemnifying Party's expense.

12.4.3 The indemnified Party shall, at the request of the indemnifying Party, provide all reasonably available assistance in the defence or settlement of any such claim, action, proceeding or investigation, and all reasonable costs and expenses incurred by the indemnified Party in connection with the defence or settlement of any such claim, action, proceeding or investigation shall be reimbursed by the indemnifying Party promptly upon demand thereof. The indemnified Party shall not settle or compromise any claim, action or proceeding without the prior Written consent of the indemnifying Party such consent not to be unreasonably with held.

12.5 Failure to Defend Action

If any claim, action, proceeding or investigation arises as to which the indemnities provided may apply, and the indemnifying Party fails to assume the defence of such claim, action, proceeding or investigation, then the indemnified Party may at the indemnifying Party's expense contest or settle such claim.

12.6 Survival: Expiration of Indemnity

The provision of this Clause 12 shall survive final take over or the termination of this Contract; provided that neither Party shall have any indemnity obligations pursuant to this Clause 12 for any claim arising out of or resulting from events or circumstances occurring after the termination of this Contract or after the expiration of the Defect Liability Period; and provided further that neither Party shall have any indemnity obligation pursuant to this Clause 12 unless notice of any such claim for indemnity by either Party is received by the indemnifying Party prior to the date that is three (3) years after the expiration of the Defect Liability Period.

13. FORCE MAJEURE

13.1. Definition of Force Majeure

"In this Clause, "Force Majeure" shall mean an event or circumstance beyond the reasonable control of the Owner/Project Manager or the Contactor which could not have been foreseen, prevented or mitigated by such Party using its reasonable diligence and which makes it impossible for such Party to perform the whole or in part its obligations under the Contract, including but not limited to:

a) Act of God.

b) An act of war, (whether declared or undeclared) hostilities invasion, armed conflict or an act of foreign enemies, blockade, embargo, revolution, military action, or sabotage.

c) Contamination by radio-activity from any nuclear fuel, or form any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive, or other hazardous properties.

d) Riot, civil commotion, terrorism or disorder, unless solely restricted to employees of the Contractor or of his Sub-contractors.

e) Natural or regional industrial disputes or targeted disputes which are part of national or regional campaign and which is not reasonably within the powers of a Party to prevent, or which is not specific to the Party or any of his Contractors or Subcontractors.

f) Operation of the forces of nature such as earthquake, hurricane, lightning, tidal wave, tsunami, typhoon or volcanic activity.

13.2 Excused Performance

If either Party is rendered wholly or partially unable to perform its obligations under this Contract because of a Force Majeure Event, that party will be excused from whatever performance is affected by the Force Majeure event to the extent so affected provided that:

a) The affected Party gives the other Party Written Notice of the occurrence of the Force Majeure Event as soon as practicable after the occurrence of the Force Majeure Event and also gives the other Party Written Notice describing in reasonable detail the particulars of such occurrence, including an estimation of its expected duration and probable impact on the performance of such Party's obligations hereunder, and thereafter continues to furnish thereto timely regular reports with respect to continuation of the Force Majeure Event;

b) The suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure;

c) No liability of either Party which arose before the occurrence of the Force Majeure Event causing the suspension of performance shall be excused as a result of the occurrence;

d) The affected Party shall exercise all reasonable efforts to mitigate or limit Damages to the other Party;

e) The affected Party shall use its best efforts to continue to perform its obligations hereunder and to correct or cure the event or condition excusing performance;

f) When the affected Party is able to resume performance of its obligations under this Contract, that Party shall give the other Party Written Notice to that effect and shall promptly resume performance hereunder.

13.3 Limitations

Notwithstanding anything to the contrary contained herein:

a) any act, event, or occurrence listed above or asserted as a Force Majeure Event that results materially from the negligence or intentional acts of the affected party (including in the case of Contractor or any Sub-contractor thereof) shall not constitute a Force Majeure Event; and

b) The affected Party shall not be relieved from obligations under this Contract to the extent that the negligence or wilful misconduct of the affected Party (or in the case of Contractor or any Sub-Contractor thereof) contributes to or aggravates the Force Majeure Event.

13.4 Effect of Force Majeure Event

Neither the Owner/Project Manager nor the Contractor shall be considered in default or in Contractual breach to the extent that performance of obligations is prevented by a Force Majeure Event, which arises after the Effective Date. Except as otherwise provided in a Change Order, an extension of time shall be granted to Contractor only to the extent Contractor proves to Owner/Project Manager:

a) The performance of the Work or supply of Goods is actually and necessarily delayed by an event of Force Majeure; and

b) The effect of such event of Force Majeure could not have been prevented or avoided or removed despite exercise of reasonable due diligence whether before, after or during the event of Force Majeure.

13.5 Payment to Contractor

If, in consequence of Force Majeure, the Site or any part thereof shall suffer loss or damage, the Contractor shall be entitled to claim and receive payment for the cost of Work or supply of Goods executed in accordance with the Contract, prior to the event of Force Majeure.

13.6 Optional Termination, Payment and Release

Irrespective of any extension of time, if a Force Majeure Event occurs and its effect continues for a continuous period of [180 days], the Owner/Project Manager at its discretion may give to Contractor a Notice of termination, which shall take effect 30 (thirty) Days after the giving of the Notice. If, at the end of the 30 (thirty) Day period, the effect of the Force Majeure Event continues, the Contract shall terminate. If the Contract is so terminated, the Owner/Project Manager shall determine the work done and pay to the Contractor all amounts due and payable for such work.

14. EXTRA ITEMS

14.1 Extra items if any shall be paid on the basis of vouchers of cost of materials and labour produced by the Contractor. Vouchers produced for materials, labour, machinery etc. shall be as per the prevailing market rates. The Contractor shall be paid 20 percent of the cost of materials, labour and operation of plant and machinery etc. required to execute the item towards his profit and overhead charges. Cost of materials will not be added for calculation of overheads/profits if the same is supplied by the OWNER/PROJECT MANAGER. For such extra work, the Contractor shall maintain time sheets of personnel engaged and machinery used for execution of same and get them certified by the OWNER/PROJECT MANAGER. Only such labour and plant cost based on above records, which in the opinion of the OWNER/PROJECT MANAGER is justified, shall be taken into account to determine the extra item rate.

14.2 Items not covered by the Schedule of Quantities but are similar in nature to the items already covered shall be paid for, the rates being worked out on the basis of rates quoted for similar items.

15. DRAWINGS AND SCHEDULE OF QUANTITIES

15.1 One set of the drawings and specifications and schedule of quantities shall be furnished by the OWNER/PROJECT MANAGER to the Contractor, and OWNER/PROJECT MANAGER shall furnish, within such time as he may consider reasonable, one copy of any additional drawing/s which in his opinion may be necessary for the execution of any part of the work. Such copies shall be kept on the works and the OWNER/PROJECT MANAGER and their representatives shall at all reasonable times have access to the same, and they shall be returned to the OWNER/PROJECT MANAGER by the Contractor before the issue of the certificate for the balance of his account under the Contract. This contract and the signed drawings and specifications and schedule of quantities shall remain in the custody, of the OWNER/PROJECT MANAGER, and shall be produced by him at his office as and when required by the OWNER/PROJECT MANAGER or by the Contractor.

15.2 OWNER shall also supply construction drawings and details progressively during the contract period, to cover all the works envisaged in the scope of the contract. Construction drawings would be issued at the commencement of the work and subsequently to ensure that progress is maintained at the required pace, to meet the agreed work schedule of completion provided design data are available. If the Contractor apprehends any delay in construction for want of drawings and details, he shall, immediately advice the OWNER/PROJECT MANAGER in writing accordingly. In case the work is retarded or even stopped temporarily for lack of details and construction drawings to proceed with, the Contractor would be given extension of time to the extent his work has been held up for want of drawings. The OWNER/PROJECT MANAGER's decision in regard to the extension of time allowed on this account shall be final and binding.

15.3 Only figured dimensions on drawings will be followed and drawings to large scale shall generally take precedence over those to a smaller scale. Detailed drawings and notes appended thereon shall be deemed to form part of the specifications and to supersede the specification in case of discrepancies. However, all documents shall be considered mutually explanatory.

15.4 CONTRACTOR shall prepare and submit detailed fabrication drawings based on the drawings and/or instructions furnished by OWNER for structural steel and works which require further detailing for successful execution of works. OWNER's ENGINEER shall review and comment such detailed drawings submitted by CONTRACTOR. CONTRACTOR will have to re-submit the commented drawings till the OWNER approves the drawings as fit for fabrication / construction. CONTRACTOR must note that it is his responsibility to timely submit and obtain OWNER'S approval on the fabrication / detailed drawings without affecting the project progress and schedule. The CONTRACTOR must submit and adhere to fabrication / detailed drawing schedule in accordance with the project requirements and to the OWNER's satisfaction as would be decided during the kick-off meeting with him.

16. MEASUREMENT OF WORKS

16.1 The OWNER/PROJECT MANAGER/ OWNER'S representative may from time to time intimate to the Contractor that they require the works to be measured and the Contractor shall attend or send a qualified agent to assist the OWNER/PROJECT MANAGER and OWNER'S representative in taking such measurements and calculations and to furnish all particulars or to give all assistance required by either of them.

16.2 Should the Contractor not attend or neglect or omit to send such agents then the measurements taken by the OWNER/PROJECT MANAGER /OWNER'S representative or approved by them shall be taken to be the correct measurements of the work. Such measurements shall be taken in accordance with the Mode of Measurements mentioned in the specification.

16.3 Any claim which the Contractor may have to make in respect of such measurement shall be made by him in writing to the OWNER/PROJECT MANAGER within seven days of the date of these measurements, failing which the measurements shall be deemed to have been accepted by the Contractor.

16.4 Where mode of measurement is not specified, the measurements will be taken at site as per I.S. Code of Practice for Measurements. The Contractor shall give all assistance for taking measurements like steel measuring tapes, scaffolds, ladder and including surveyors with surveying instruments for checking and confirming levels.

17. NIGHT WORK

17.1 The Contractor is normally expected to work during daytime only and is required to complete the work in all respects as stipulated elsewhere. However, night work may be stipulated by the OWNER/PROJECT MANAGER or permitted in exigencies with prior approval of the OWNER/PROJECT MANAGER.

17.2 Sufficient lights shall be provided by the CONTRACTOR to safeguard the workmen and the public and to afford adequate facilities for properly placing and inspecting the material when the night work is in progress.

18. ARBITRATION

18.1 In case any dispute or difference shall arise between the OWNER/PROJECT MANAGER or the ENGINEER on his behalf and the CONTRACTOR arising out of or in relation to or concerning this Contract or the construction, meaning, operation or effect hereof or of any clause herein contained or as to the rights, duties or liabilities of the parties hereto respectively or of the ENGINEER under or by virtue of these presents or otherwise or in connection with the subject matter of these presents or arising out of or in relation thereto (except as to matters left to the sole discretion of the ENGINEER) the same shall be referred to the arbitration of a single arbitrator in case the parties can agree upon one, otherwise, to two arbitrators, one to be appointed by each party and an umpire to be appointed by the two arbitrators before entering upon the references and in either case in accordance with and subject to the provisions of the

Indian Arbitration and Reconciliation Act 1996 or any statutory modification or re-enactment thereof for the time being in force. All arbitration proceedings shall be conducted in English language only and the decision of the arbitration tribunal constituted in accordance with the above shall be final and binding upon the parties. Each party to the dispute shall bear its own costs, unless otherwise specified by the arbitration tribunal in its order. The seat and venue of all arbitration proceedings under this Contract shall be Mumbai.

18.2 Work under the Contract shall, continue during the arbitration proceedings and no payments due or payable by the OWNER/PROJECT MANAGER shall be withheld on account of such proceedings.

19. SCHEDULE OF QUANTITIES - NO CLAIM BECAUSE ACTUAL QUANTITIES DIFFER FROM PRELIMINARY STATEMENT

19.1 The quantities of the various kinds of work to be done and materials to be furnished under this Contract which have been estimated and are set forth in the proposal or the Agreement or the Schedule of Quantities and Rates are the best available, but may not be accurate in any or all particulars and are only for the purpose of comparing on a uniform basis the bids offered for the work under this Contract

19.2 The CONTRACTOR agrees that neither the OWNER/PROJECT MANAGER nor the ENGINEER nor any of the employees or agents thereof shall be held responsible if any of the said estimated quantities should be found to be not even approximately correct in the construction of the work and that he will not at any time dispute or complain of such statement nor assert that there was any misunderstanding in regard to the character, size and type of work to be done or the kind or amount of the materials to be furnished or work to be done. Further, the CONTRACTOR shall make no claim for anticipated profits, for loss of profit or for damage because of a difference between the quantities of the various kinds of work to be done or materials actually delivered and the estimated quantities set forth by the OWNER/PROJECT MANAGER or the ENGINEER

19.3 The rates/prices quoted by the CONTRACTOR in the schedule of rates/prices shall be firm irrespective of any variation in the quantities of individual items of work and/or in the total Contract Price unless otherwise specified in Special Conditions of Contract.

20. CONTRACTOR INFORMED, AS TO THE CONDITIONS

20.1 The CONTRACTOR shall inspect, examine and obtain all information and satisfy himself regarding all matters and things such as right of way, surface and sub-surface water conditions to be encountered, the character of equipment and facilities needed for the prosecution of work; the location and suitability of all construction materials, the quantities of various sections of the work, and local labour conditions, relating to the execution and maintenance of the works to be carried out under the Contract or any hindrances or interference's to or with construction and maintenance of the works from any cause whatsoever including any other operation of works,

which may or will be carried out on or adjacent to the site of the works under the Contract and shall make allowance for all such contingencies in the Contract Price and will not raise any claims or objections against the OWNER/PROJECT MANAGER in any of such matters as mentioned above.

20.2 The acceptance of the order or making of a Contract will be construed as evidence that such an examination was made and later claims for labour, equipment or materials required for difficulties encountered will not be allowed.

20.3 Any record of subsurface condition, water records and other observations which may have been made by the ENGINEER/OWNER/PROJECT MANAGER have been made with reasonable care and accuracy. Such records may be made available to the CONTRACTOR for his information, if available, but there is no expressed or implied guarantee, as to the accuracy of the records nor any interpretation of them. The CONTRACTOR shall recognise this and form his own opinion of the character of the materials to be encountered or excavated, from an inspection of the ground and put his own interpretation on records.

20.4 The prices quoted by the CONTRACTOR shall be based on his own knowledge and judgement of the conditions and hazards involved and not upon any representation of the OWNER/PROJECT MANAGER or ENGINEER.

21. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

21.1 The CONTRACTOR shall provide everything necessary for the proper execution of the Works according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the CONTRACTOR finds any discrepancy therein shall immediately and in writing refer the same to the ENGINEER whose decision shall be final and binding on the parties.

21.2 The CONTRACTOR shall supply, fix and maintain at his cost, during the execution of any works all the necessary cantering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, hoarding, watching and lighting by night as well as by day, etc required not only for the proper execution and protection of the Works, but also for the protection of the public and the safety of any adjacent roads, streets, cellars, vaults, walls, houses, buildings and all other erections, matters or things, and the CONTRACTOR shall take out and remove any or all such cantering, scaffolding, staging, planking, timbering, strutting, shoring etc. as occasion shall require or when ordered to do so and shall fully reinstate and make good all matters and things disturbed during the execution of the works to the satisfaction of the ENGINEER. The CONTRACTOR shall be paid no additional amount for the above and for any access roads to be made to reach the construction site.

21.3 All materials shall be new and of the best respective kinds described in the schedule of quantities and/or Technical Specifications and in accordance with the Engineer's Instructions and the CONTRACTOR shall upon the request of the ENGINEER, furnish him with all invoices,

accounts, receipts, certificates and other vouchers, to prove that the materials comply therewith. The CONTRACTOR shall at his own cost arrange for and/or carry out any test of materials which the ENGINEER may require. The contractor shall establish and operate a full-fledged cement and concrete testing laboratory at site and depute a full time qualified QA/QC engineer for the duration of the contract at no extra cost to the Owner/Project Manager. Such full-fledged cement and concrete testing laboratory at the site shall be as per provision of IS: 456 and CONTRACTOR shall also depute an independent qualified QA/QC engineer full-time at the site for the duration of the contract.

21.4 It shall be the responsibility of the CONTRACTOR to unload and store in a safe and acceptable manner all construction materials as directed by the Owner/Project Manager.

21.5 The CONTRACTOR is required to provide and maintain all tools, and equipment and instruments necessary to perform his work. He shall provide all fuels, lubricants and compressed air for the operation and maintenance of his construction tools.

21.6 The CONTRACTOR is to arrange for all his requirements of such materials including but not limited to oxygen, Acetylene, pipes, ropes, welding rods etc required for performing the Works.

21.7 Samples of all materials to be used, whether cement, steel, bricks, rubble stone, aggregate, sand, timber, tiles, granite, finishing & building interior etc. shall be submitted by the CONTRACTOR and must be got approved by the Owner/Project Manager before they are used. Approved samples shall be kept with the Owner/Project Manager and all supplies shall strictly conform to the approved samples. Materials not strictly conforming to the samples are liable to the rejected.

21.8 The CONTRACTOR shall not sell, assign, mortgage, hypothecate or remove equipment or materials which have been installed or which may be necessary for the completion of the Contract without the written consent of the Owner/Project Manager.

21.9 CONTRACTOR shall provide and maintain at the site necessary number and type of machinery and equipment including survey instruments, TOTAL Station, Auto level etc. in good working condition for proper setting out and timely completion of the various works covered under Relevant Package. All arrangements for transporting the equipment to and from the site shall be done by the CONTRACTOR at his own expense. Contractor has to provide all the survey equipments including all technicians, helpers etc., for checking other works also if so desired by Owner with no additional cost of the Owner. No claim shall be entertained for mobilising additional equipment and/or personnel to complete the work within the stipulated time.

21.10 CONTRACTOR shall provide all fuels and lubricants required for the operation and maintenance of construction machinery and equipment as well as his transport vehicles.

21.11 CONTRACTOR shall at his cost arrange for all his requirements of such materials as, but not limited to, oxygen, acetylene, welding electrodes, ropes, form ties, turn-buckles, clamps, wiping rags and sand papers etc. which are required to satisfactorily perform his work.

21.12 It shall be ensured by the CONTRACTOR that work shall proceed uninterrupted even in the event of power failures with the help of DG Sets and Diesel compressors. As such, adequate number of diesel operated machinery (such as boring rigs, concrete mixers, vibrators, welding sets, etc.) shall be provided by the CONTRACTOR as an alternative arrangement in case electrically operated machinery are proposed to be brought to site.

21.13 The CONTRACTOR will be required to provide at his own cost all facilities for his office, warehouse, tool room, change room or any other building/structure required to the Works.

21.14 CONTRACTOR shall establish his own office / shed at specified place inside/near the project site for his worker/staff. The CONTRACTOR's office/shed shall be porta-cabin type. Only the shed for storing Cement shall be in brick masonry. In addition the office/shed shall have proper ventilation lighting and sanitary facilities. CONTRACTOR shall plan their site facilities and obtain clearance from the OWNER before construction of the Office/shed.

21.15 All royalties shall be paid by the CONTRACTOR as also all tolls, local and other taxes, etc. at no extra cost to OWNER. The rates quoted for excavation shall include Collector's permissions for Excavation permits, Royalty payments, disposal in MCGM (Debris Cell management) approved yard etc.

21.16 All materials supplied by the CONTRACTOR shall be of the best quality and shall conform to the Technical Specification. Approval in writing shall be obtained from OWNER before any alternative or equivalent material is proposed to be used by the CONTRACTOR.

21.17 The CONTRACTOR shall get tested all materials supplied by him in a OWNER approved laboratory, as directed by ENGINEER or as specified in the corresponding code of practice, at no extra cost to the OWNER. This is in addition to furnishing the Manufacturer's Test Certificate where available.

21.18 CONTRACTOR shall obtain all necessary permits and licenses before commencement of work at no extra cost to OWNER.

21.19 The CONTRACTOR shall have PF coverage, for all workmen in his permanent employee as well as those temporarily hired by him for the said project. He shall also have ESIC cover for all workmen, permanent as well as temporary if required by law. The cost for both the above viz. PF as well as ESIC shall be deemed to have been covered in the rate quoted by contractor. The OWNER shall not pay any extra charges over and above the rates quoted for these statutory payments.

21.20 Ash shall be utilized in Civil Works to the extent possible without affecting the quality and engineering requirements. Vendor shall declare Ash utilization Quantity or Percentage of ash used in allied civil works. Wherever available, ash shall be made free of cost at point of generation for the purpose by Owner. The usage of ash for the purpose shall be approved by Engineer-in-charge / Order Manager .

22. TO DEFINE TERMS AND EXPLAIN PLANS

22.1 The various parts of the Contract are intended to be complementary to each other, but should any discrepancy appear, or any misunderstanding arise as to the import of anything contained therein, the explanation of the OWNER/PROJECT MANAGER shall be final and binding. The correction of any errors or omissions of the drawings and specifications may be made by the OWNER/PROJECT MANAGER, when such correction is necessary to bring out clearly the intention, which is indicated by a reasonable interpretation of the drawings and specifications as a whole.

22.2 The OWNER/PROJECT MANAGER may from time to time prepare for his own use estimates of quantities or bills of materials required for the work. Copies of such estimate or bills of materials which may be given to the CONTRACTOR for his convenience, or any lists, weights, or quantities of materials or structures which may appear on the drawings shall not be considered as finally correct, sufficiently complete, or accurately covering any portion or all the work to be done under this Contract. Such bills or estimates may be carefully assembled and prepared but their accuracy is not guaranteed. They may or may not be accurate as to any particular detail and are given only as the best information available at the time of issue of the information. It is mutually understood that any such lists or estimates are furnished to the CONTRACTOR for his convenience only and not as lists or estimates of work to be done, many necessary items of work being omitted.

23. ENGINEER TO DIRECT WORK AND ORDER ALTERATIONS, MODIFICATIONS, DELETIONS

23.1 The OWNER/PROJECT MANAGER shall have the right but not obligation to direct the manner in which all work under this Contract shall be conducted in so far as may be necessary to secure the safe and proper progress and the specified quality of the work, and all work shall be done and all material shall be furnished to the satisfaction and approval of the OWNER/PROJECT MANAGER.

23.2 Additional drawings and explanations to exhibit or illustrate details may be provided by the OWNER/PROJECT MANAGER and shall be so provided whenever necessary and shall be binding upon the CONTRACTOR. The written decision of the OWNER/PROJECT MANAGER as to the true interpretation and meaning of the drawings and specifications and of such additional drawings and explanations shall be binding upon the CONTRACTOR.

23.3 If at any time the CONTRACTOR's methods, materials, or equipment appear to the OWNER/PROJECT MANAGER to be unsafe, inefficient or inadequate for securing the safety of the workmen or the public, the quality of work or the rate of progress required, he may order the CONTRACTOR to increase their safety, efficiency and adequacy, and the CONTRACTOR shall comply with such orders. If at any time the CONTRACTOR's working force and equipment are, in the opinion of the ENGINEER, inadequate for securing the necessary progress, as herein stipulated, the CONTRACTOR shall, if so directed, increase the working force and equipment to such an extent as to give reasonable assurance of compliance with the schedule of completion.

The failure of the OWNER/PROJECT MANAGER to make such demands shall not relieve the CONTRACTOR of his obligations to secure the quality, the safe conducting of the work, and the rate of progress required by the Contract, and the CONTRACTOR alone shall be and remain liable and responsible for the safety, efficiency, and adequacy of his methods, materials, working force, equipment and timely completion of job irrespective of whether or not he makes any change as a result of any order or orders received from the OWNER/PROJECT MANAGER.

23.4 The OWNER/PROJECT MANAGER shall have the power to make any alteration in, omissions from additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the CONTRACTOR shall be bound to carry out the work in accordance with any instructions that may be given to him in writing by the OWNER/PROJECT MANAGER and such alterations, omissions, additions or substitutions shall not invalidate the Contract. Any altered, additional or substituted work which the CONTRACTOR may be directed to do in the manner above specified as part of the work, shall be carried out by the CONTRACTOR on the same conditions in all respects on which he agreed to do the main work and at the same rates as are specified in the Contract for the main work, unless such alterations are not identical with items of work and form extra items.

23.5 The time for completion of the work shall be extended in the time proportion that the altered, additional or substituted work bears to the original contract and the decision of the OWNER/PROJECT MANAGER shall be conclusive and binding on the CONTRACTOR.

24. CONTRACTOR'S SUPERVISION

24.1 The CONTRACTOR shall, during the whole time the work is in progress, employ a qualified engineer to be in-charge of the works with adequate experience in handing of jobs of this nature and with the prior approval of the OWNER / PROJECT MANAGER. Such engineer shall be constantly in attendance at the site during working hours. During Contractor's representative's absence during working hours, when it may be necessary to give directions and orders by the ENGINEER / OWNER/PROJECT MANAGER, such orders shall be received and obeyed by the CONTRACTOR'S engineer in-charge who may have charge of the particular part of the work in reference to which orders are given.

If requested to do so, the ENGINEER /OWNER / PROJECT MANAGER shall confirm such orders in writing. Any directions, instructions or notices given by the ENGINEER/OWNER / PROJECT MANAGER to Contractor's Engineer-in-charge shall be deemed to have been given to the CONTRACTOR. Such engineer in-charge of CONTRACTOR shall have all necessary powers to engage labour or purchase materials and proceed with the work as required for speedy execution in accordance with the Contract.

Apart from the above, a separate and independent planning and monitoring cell of adequate and suitable back-up in the form of computers and project management software (Microsoft Project or Primavera Only) shall also be available at site full time. This cell shall prepare overall and detailed construction programmes and submit weekly / fortnightly / monthly progress and hold-up reports.

24.2 None of the CONTRACTOR's Superintendents, engineers, supervisors or labour should be withdrawn from the work without due notice being given to the OWNER/PROJECT MANAGER/ENGINEER; further no such withdrawals shall be made if in the opinion of the OWNER/PROJECT MANAGER/ENGINEER such withdrawals will jeopardise the required pace of progress/successful completion of the work.

24.3 The CONTRACTOR shall employ in or about execution of the work only such persons as are careful, skilled and experienced in their respective trades, and the OWNER/PROJECT MANAGER shall be at liberty to object to and require the CONTRACTOR to remove any person employed by the CONTRACTOR in or about execution of works who in the opinion of the ENGINEER misconducts himself or is incompetent or negligent in the proper performance of his duties and all such persons shall not again be employed upon the works without the prior permission of the OWNER/PROJECT MANAGER.

24.4 Neither the CONTRACTOR, the OWNER/PROJECT MANAGER nor the ENGINEER shall hire or employ any employee of the other party except by mutual consent.

25. SETTING OUT WORKS

25.1 The CONTRACTOR shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the CONTRACTOR shall at his own expenses rectify such error, if called upon, to the satisfaction of the OWNER/PROJECT MANAGER.

25.2 The CONTRACTOR shall establish and maintain base lines and bench marks adjacent of the various sections of work. All such marks and stakes must be carefully preserved by the CONTRACTOR, and in case of their destruction by him or any of his employees, they will be replaced at the CONTRACTOR's expense.

25.3 The CONTRACTOR shall be responsible for the accuracy of all dimensions within the various sections of the work according to the figures of dimensions on the drawings.

26. CONSTRUCTION SUPERVISION AND WORKMANSHIP

26.1 The OWNER/PROJECT MANAGER will engage his own supervisory staff at the site of works as may be deemed fit. The CONTRACTOR shall afford the supervisors every facility and assistance for examining the works and materials for checking and measuring the works and materials. The supervisors shall have no power to revoke, alter, enlarge or relax any requirement of the CONTRACTOR, but may sanction any day work, additions, alterations, deviations or omissions, or any extra work whatever as may be authorised by the OWNER/PROJECT MANAGER.

26.2 The Supervisors engaged by OWNER/PROJECTMANAGER will act ENGINEER's representatives and shall have power to give notice to the CONTRACTOR or to his Foreman of non-approval of

any work or materials, and such work shall be suspended or the use of such material shall be discontinued, until the decision of the ENGINEER is obtained.

26.3 The work shall be conducted under the general direction of the ENGINEER and is subject to inspection by his supervisors to ensure strict compliance with the terms of the Contract. No failure of the ENGINEER or his supervisors during the progress of the work to discover or to reject materials, or work not in accordance with the requirement of this Contract shall be deemed as acceptance thereof or a waiver of defects therein and no payment by the ENGINEER on partial or entire occupancy of the premises shall be construed to be an acceptance of the work or materials which are not strictly in accordance with the requirements of this Contract. No changes whatsoever to any provision of the specifications shall be made without written authorisation of the OWNER/PROJECT MANAGER.

26.4 The CONTRACTOR shall execute the whole and every part of the work in the most substantial and workmanlike manner as regards material and in all other respects.

26.5 If it shall appear to the ENGINEER/OWNER/PROJECT MANAGER that any work has been executed with unsound, imperfect or unskilled workmanship, or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for, or otherwise not in accordance with the Contract, the Contractor shall on demand in writing from the ENGINEER/OWNER/PROJECT MANAGER, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct such work in whole or in part as the case may require or as the case may be, remove such materials or articles at his own proper charge and cost. In the event of his failing to do so within seven days of receipt of the ENGINEER'S written notice thereof, or any other period mentioned in such notice, the ENGINEER may rectify or remove and re-execute the work or remove and replace with other materials and articles complained of, as the case may be, at the risk and expense of the CONTRACTOR in all respects.

Also in the event the CONTRACTOR fails to carry out the rectification within the period stipulated above, the CONTRACTOR shall be liable to pay compensation at the rate of quarter (1/4) percent of the total Contract Value, for every week or part thereof, beyond the period stipulated above, that the rectification work remain incomplete.

26.6 The provisional acceptance of sections of the work for the purpose of preparing partial estimates and the payment of money for such partial estimates shall not operate as a waiver of any portion of this Contract and shall not be construed so as to prevent the ENGINEER from requiring replacement of defective work that may become apparent after the said provisional acceptance and shall not be construed in any way as the basis for a claim of extra compensation for any cause whatsoever by the CONTRACTOR.

27. UNFIXED MATERIALS WHEN TAKEN INTO ACCOUNT TO BE THE PROPERTY OF OWNER/PROJECT MANAGER

27.1 Wherein any certificate, of which the CONTRACTOR has received payment, the ENGINEER has included the value of any unfixed materials intended for and/or placed on or adjacent to the works, such materials shall become the property of the OWNER/PROJECT MANAGER (for any loss or damage to materials the CONTRACTOR shall be responsible) and they shall not be removed from the site, except for the works, without the written authority of the OWNER/PROJECT MANAGER.

28. INTOXICANTS

28.1 The CONTRACTOR shall not permit or suffer the introduction or use of intoxicating liquor upon the works embraced in this Contract, or upon any of the ground occupied or controlled by him.

29. WORK IN MONSOON AND DEWATERING

29.1 The construction and erection work may entail working in monsoon also. The CONTRACTOR must maintain a minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered for such work in monsoon.

29.2 During monsoon and other period it shall be the responsibility of the CONTRACTOR to keep the construction site free from accumulating of water, at his own cost.

29.3 During inclement weather, rains, CONTRACTOR shall suspend concreting for such time as the ENGINEER may direct and shall protect from damage all works already in progress or completed just then. All such temporary protective measures shall be at CONTRACTOR's cost and any damage to works shall be made good by the CONTRACTOR at his own expense. Upon resumption with ENGINEER's consent/notice, CONTRACTOR shall make good any deterioration or defect in or loss of the Works or Materials, which has occurred during the suspension.

30. HOLD HARMLESS CLAUSE

30.1 The CONTRACTOR shall be fully responsible for the due compliance by him and his sub-contractors with all statutory requirements and with all applicable labour laws including Contract Labour Abolition and Regulation Act, Workmen's Compensation Act, P.F./E.S.I., Labour welfare fund, Act as may be applicable to the Contractor, the sub-contractors and their employees. The Contractor shall fully indemnify and save harmless the OWNER/PROJECT MANAGER from and against all claims, demands, expenses, losses, liabilities, charges, actions, suits and proceedings whatsoever including claims under aforesaid Acts and laws which may be brought or made against the OWNER/PROJECT MANAGER, its Officers or servants by reason or in consequence of any matter or thing done or omitted to be done by the CONTRACTOR and/ or the sub-contractors and all costs, charges and expenses which may become payable by the OWNER/PROJECT MANAGER in respect thereof.

31. DEMOBILISATION

Upon completion of work, the CONTRACTOR shall promptly demobilise from the site and leave the place in a manner as directed by the OWNER/ENGINEER, including cleaning of the area. CONTRACTOR shall start demobilisation only after the successful completion of the contract. No equipment, plant material or personnel shall be de-mobilised from the site unless with the express consent of the OWNER's Project Manager. The OWNER reserves the right to disallow in de-mobilisation if works under this scope of this contract are not completed to his satisfaction.

32. NOT USED

33. SUSTAINABILITY

The Contractor shall abide to the Owner / Project Manager's Corporate Environment policy, Corporate Sustainability Policy and Tata Power Sustainable Procurement Policy (enclosed).
The Contractor should strive towards Conservation of Energy, Water, Resources and optimize transportation of Men & Materials to minimize environmental impact and reduce carbon footprint.
The Contractor should carry out the assessment of materials used for construction, operation & maintenance, consumables and accordingly phase out those materials which are environmentally hazardous.
The Contractor organization should be ISO 14001 and SA 8000 and OHSAS-18001 certified. If not, Contractor shall certify that the handling, use and disposal of all materials & products shall be consistent with sound environment management.

The Contractor commits that: that no child labour, No forced labour, Non discrimination on the basis of caste, colour, religion, gender, disability and any other factor unrelated to the requirements of the job.
The Contractor commits to equal pay for equal value of work, especially for women. The Contractor should carry out assessment of their Sub-contractors on their Sustainability Readiness so that they comply with the above mentioned standards.

34. Total Compliance to TCOC, SHE and Safety Terms & Conditions

The Contractor shall abide and comply with Owner / Project Manager's Safety, Health & Environment policies, Safety Terms & Conditions, Sustainability and TCOC manuals / documents as enclosed, in totality.

35. CHANGES IN CONSTITUTION

Where the CONTRACTOR is a partnership firm, the previous approval in writing of the ENGINEER and the OWNER / PROJECT MANAGER shall be obtained before any change is made in the constitution of the firm and where the Contractor is an incorporated entity, the previous approval in writing of the ENGINEER / PROJECT MANAGER shuld be obtained before any change in Control of the Contractor. Where the CONTRACTOR is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the CONTRACTOR enters into any partnership agreement where-under the partnership firm would have the right to carry out the work hereby undertaken by the CONTRACTOR.

36. MISCELLANEOUS

36.1 Non-Waiver

Neither Party shall be deemed to have waived any right under this Contract unless such Party shall have delivered to the other Party a written waiver signed by such waiving Party. No failure or successive failure by either Party to enforce any covenant or agreement, and no waiver or successive waivers by either party of any condition of this Contract, shall operate as a discharge of such covenant, agreement or condition, or render the same invalid, or impair such Party's right to enforce the same in the event of any subsequent breach thereof by the other Party.

36.2 Severability

If any of the terms, covenants or conditions hereof or the application of any such term, covenant or condition shall be held invalid or unenforceable as to either Party or as to any circumstance by any court or arbitrator having jurisdiction, the remainder of such terms, covenants or conditions shall not be affected thereby, shall remain in full force and effect and shall continue to be valid and enforceable in any other jurisdiction. In such event, the Parties shall negotiate in good faith to substitute a term, covenant or condition in this Contract to replace the one held invalid or unenforceable by a mutually agreed amendment to this Contract with a view toward achieving a valid and enforceable legal and economic effect as similar as is then reasonably possible to that originally provided for in this Contract.

36.3 Survival of Provisions

In order that the Parties may fully exercise their rights and perform their obligations hereunder arising from the performance of the Work, such provisions of this Contract that are required to insure such exercise or performance shall survive the termination of this Contract for any cause whatsoever.

36.4 Entire Agreement

This Contract constitutes the entire agreement and contains all of the understandings and agreements of whatsoever kind and nature existing between the Parties, and supersedes, to the extent permitted by Indian law, all prior written or oral agreements, commitments, representations, communications and understandings between the Parties.

36.5 Amendment

No amendment, waiver or consent relating to this Contract shall be effective unless it is in writing and signed by the Parties.

36.6 Successors and Assigns

All of the terms and provisions of this Contract shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. This Contract is for the sole benefit of the Parties, and to the extent provided herein, the Indemnities, and is not for the benefit of any other Person.

36.7 Counterparts

This Contract may be executed in one or more counterparts, each of which shall be deemed to be an original and all such counterparts shall together constitute one and the same contract.

36.8 No Benefit to Third Parties

For the avoidance of doubt, this Contract is not intended to confer any legally enforceable rights on any Person other than the Parties, their successors in title and their permitted assignees.

36.9 Certification

The Contractor should be ISO 14001 and SA 8000 and OHSAS-18001 certified. In the event Contractor does not have the certification, then the Contractor should certify that the handling, use and disposal of the product shall be consistent with sound environment management.

36.10 Liability Limitation:

CONTRACTOR's total liability to the OWNER/PROJECT MANAGER for all matters under or arising out of this Contract, other than the Excluded Matters, is limited to 100% of the Total Contract value in aggregate. For the purposes of this clause 36.10, "Excluded Matters" shall mean liabilities arising on the Contractor on account of fraud, willful default, reckless misconduct by the Contractor or any regulatory penalties / third party claims that are made on the Owner on account of a breach of this Contract by the Contractor..

37. NOVATION

At the Owner's sole discretion, the Contractor shall have no objection and will fully extend co-operation for Novation of this Contract to any Tata Group Companies including Tata Power associates and subsidiaries; if the situation so warrants.

38. DECLARATION BY CONTRACTOR

All articles, Clauses, Conditions, Manuals, instructions cross referred in this GCC are fully read, understood by the Contractor in their entirety for fruitful implementation.

ESG FRAMEWORK FOR BUSINESS ASSOCIATES

Tata Power's Sustainability philosophy sits at the core of its Business Strategy. Tata Power Sustainability Model has an overarching objective of 'Leadership with care' with key elements of 'Care for the Environment'; 'Care for the Community'; 'Care for our Customers / Partners' and 'Care for our People'. These sustainability objectives encompass the Environmental, Social and Governance objectives driven as integrated elements.

Tata Power, together with its stakeholders is determined to achieve sustainable growth while creating shared value for all.
As a part of future ready roadmap, Tata Power has targeted following as our Environment, Social and Governance priorities:

- Being Carbon Net Zero before 2045
- Growing Clean capacity (80% by 2030)
- Customer centricity
- Becoming water neutral before 2030
- Achieving zero waste to landfill before 2030
- No net loss of biodiversity before 2030
- Positively impacting 80 million lives by 2027

In order to create a sustainable business ecosystem, Tata Power expects that all its Business Associates (BA) which includes its suppliers, vendors, consultants and service providers to align to its ESG and sustainability commitments.

Tata Power encourages improved efficiencies and scaling up of green initiatives through technology and innovation taking us farther on the journey of reducing carbon emissions and preparing the entire eco-system towards products and services that would have net positive impact on the environment and communities that we operate in.

The Vendors/ bidders wishing to associate with Tata Power are expected to share their own sustainability and ESG journey. We at Tata Power promote all Business Associates to have a sustainable procurement policy for their supplier and service providers to contribute to our integrated approach in achieving a sustainable supply chain. The BA is encouraged to carry out the assessment of their sub-contractors and sub-vendors on sustainability readiness so that they are aware of the expectation/ business requirement.

The Vendor/ Bidder shall fill-in the 'Environment, Social and Governance Compliance Screening Questionnaire for Business Associates' attached at Annexure-I and submit the same along with the Bid in Ariba online platform.

Responsible Supply Chain Management:

Tata Power is committed for a cleaner environment and respect of Human rights through its Responsible Supply Chain Management policy.
Tata Power Business Associate (BA) shall comply with all the environment & Human rights related laws, including emission norms, Labour and environmental regulations.

Tata Power encourages its BA to focus on green design, green supply, green production, green logistics and green packaging in performing their business obligations. The BA is expected to abide by the Tata Power Corporate Environment policy, Energy Conservation and Corporate Sustainability Policy (enclosed with this document as Annexure-II).

The BA is expected to:

- Strive towards Conservation of Energy, Water, Resources and optimize transportation of Men & Materials to minimize environmental impact and reduce carbon footprint.
- Carry out the assessment of materials used for construction, operation & maintenance, consumables and accordingly phase out those materials which are environmentally hazardous.
- Be cognizant that diversity in the workplace positively impacts business.
- Promote affirmative action by supporting people from SC/ ST background by engaging workforce from SC/ ST community under the contracts agreed herein.
- Share the commitment of 'No child labour', 'No forced labour', Non-discrimination on the basis of caste, colour, religion, gender, disability, maternity or pregnancy or any other factor unrelated to the requirements of the job
- Pay the wages or remuneration to the workforce, personnel deployed in compliance to all applicable laws and regulations.
- Provide its employees/ deployed labor with an employment environment that is free of physical or psychological harassment.
- Carry out the assessment of their Sub-contractors on their Sustainability Readiness so that they are aware of the above expectation/ standards
- To ensure usage of suitable package material which is more environmentally sustainable. Further the packing material shall be recycled to the extent possible. The material used for packing is expected to suit the mode of transport and to ensure its safe receipt at point of delivery.

Waste Disposal:

The BA is expected to follow best practices for disposal of waste, few of which are listed below:

- Have a detailed project plan that includes the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/ destination in timely and safe manner as per environmental legislations. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise.

- Have purchase policy to encourage the procurement of material with recycled and minimum packaging of goods during delivery and appropriate means for site-to-site transportation of materials to avoid damage and litter generation.

- Ensure that the residents living near the site are kept informed about proposed working schedule and timings/ duration of any abnormal noise full activity that is likely to happen.

- Ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

Water Management:

The BA is expected to follow best practices for water management, few of which include a management and monitoring system for water withdrawals and consumption, procedures to reduce water usage or reuse/recycle water, and pretreatment of wastewater before disposal.

Compliance to Law:
The BA shall adhere to responsible business practices and comply with the provision of all the Statutory Acts Applicable. Special attention of the BA is drawn towards the compliance of provision of the following statues: (along with the latest amendments/additions, as applicable):

- The Child Labour (Prohibition and Regulation) ACT, 1986.
- The Contract Labour (Regulation and Abolition) ACT, 1970.
- The Employee's Pension Scheme, 1995.
- The Employee's Provident Funds and miscellaneous provisions Act, 1952.
- The Employees State Insurance Act, 1948.
- The Equal Remuneration Act, 1976.
- The Industrial Disputes Act, 1947.
- The Maternity Benefit Act, 1961.
- The Minimum Wages Act, 1948.
- The Payment of Bonus Act, 1965
- The Payment of Gratuity Act, 1972.
- The Payment of Wages Act, 1936.
- The Shops & Establishment Act, 1954.
- The Workmen's Compensation Act, 1923.
- The Employer's Liability Act, 1938.
- and any other applicable statutory act

Social Accountability (SA 8000):

Tata Power expects its BAs to follow guidelines of SA 8000:2014 on the following aspects

- Child Labour
- Forced or Compulsory Labour
- Health & Safety
- Freedom of Association & Right to Collective Bargaining
- Discrimination
- Disciplinary Practices
- Working Hours
- Remuneration
- Management System

Health and Safety

The BA is expected to ensure the health and safety of his and his Sub-contractor’s staff and labour. The BA shall, in collaboration with and according to the requirements of the local health authorities, ensure that medical staff, first aid facilities, sick bay and ambulance service are available at the accommodation and on the Site at all times, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The BA shall maintain records and make reports concerning health, safety and welfare of persons deployed, and damage to property, as the Owner’s Representative may reasonably require. The BA shall be responsible for the medical treatment / hospitalization of his and his Sub-contractor’s staff/ labour.

The BA shall appoint a qualified Safety officer at the Site to be responsible for maintaining the safety, and protection against accidents, of all personnel on the Site. Such Safety officer shall have the authority to issue instructions and take protective measures to prevent accidents.

The BA shall comply in toto with the Tata Power's Contractor Safety Terms & Conditions, Health Safety & Environment Manual while working on Tata Power Site/ Services/ Contracts.

Grievance Mechanism

The BA is expected to have grievance procedures that allow stakeholders to anonymously bring environmental and/or work-related violations and/or concerns to the attention of management. In addition, the BA is expected to have procedures for examining reports of environmental and/or work-related violations or concerns and/or privacy complaints.

Data Protection

The BA is expected to have a formal process to address data security or privacy issues.

ANNEXURE-I

Sr. No.	Question Description	Response (Y/N)	Remarks
Organization			
1	Does your Company have Sustainability Policy at Organization Level? If Yes, Please attach		
2	Do you have sustainable procurement policy in place for your own suppliers? If Yes, Please attach		
3	Does your company do regular assessment of its suppliers on ESG parameters?		
4	Are there ESG risks, or negative impacts identified in your supply chain		
Governance			
1	Is diversity taken into consideration when appointing board members/ senior management? Do you have an independent director/s?		
2	Has your company taken initiatives to ensure ethical practices at workplace? Please share the details, Policies etc.		
3	Does your company have a formal process to address data security or privacy issues? Please share the details, Policies etc.		
4	Does your company have grievance mechanism for stakeholder issues and track resolution?		
Environment/ Planet			
1	Does your company have Environmental Policy? If Yes, Please attach		
2	Do you have a formal process for waste management including solid wastes, liquid wastes and hazardous waste?		
3	Does your company track greenhouse gas emission? Also, what percentage of own consumption comes from the renewable energy?		
4	Does your company have a formal process for water management including monitoring of water consumption and withdrawals, and if applicable, pretreatment of wastewater?		
Green Technology/ Innovation			
1	Are your facility/ Product/ Services provided by you is based on green design, green production, green packaging or green logistics considerations? Please elaborate.		
2	Do your products or services have any environmental or social features or benefits (e.g. environmental/energy certification, ecolabels, fair trade certification, etc.)?		
Social/ People			
1	Does you facility/ Company have written personnel policies in place Are you an equal opportunity employer?		
2	Please describe any formal programme / campaign in place to promote company involvement with the community (volunteering, etc.). What is the percentage of profit spend on community activities?		
3	Does your company have a written Health & Safety Policy or Program? If Yes, Please attach		
Certifications: Does your company have following certifications (valid till date-please mention validity)			
1	ISO9001 accreditation		
2	SA8000 or equivalent		
3	ISO 14001 certification		
4	ISO 18001/45001 or equivalent		
5	ISO/IEC 27001 or equivalent		
6	Any Other (Please specify)		

Signature

Business Associate Name

ANNEXURE-II

CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
    - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
    - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
    - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
    - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
    - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER
Lighting up Lives!

Supplier Code of Conduct

Tata Power follows the Tata Code of Conduct (TCoC) and the Whistle blower Policy and expect all its Suppliers to adhere to the same principles. **"Supplier"** here means any business, company, corporation, person or other entity that provides, sells or seeks to sell, any kind of goods or services to Tata Power, including the Supplier's employees, agents and other representatives. The suppliers are expected to adhere to the following Do's and Don'ts:

Do's

1. The Suppliers shall be committed to supplying products and services of high quality that meet all applicable standards and laws, including product packaging, labelling and after-sales service obligations.
2. Comply with all applicable laws and regulations, both in letter and in spirit, in all the territories in which it operates.
3. Strive to provide a safe, healthy and clean working environment for its employees.
4. Strive for environmental sustainability, particularly with regard to the emission of greenhouse gases, consumption of water and energy and the management of waste and hazardous materials.
5. The Supplier shall represent our company (including Tata brand) only with duly authorised written permission from our company.
6. Safeguard the confidentiality on the use of intellectual property, information and data of the Company.
7. Gifts and hospitality given or received should be modest in value and appropriate as per Company Policy.
8. The assets of Tata Power shall be employed primarily and judiciously for the purpose of conducting the business for which they are duly authorised.
9. All actual or potential conflicts due to financial or any other relationship with a Tata Power employee shall be disclosed.

Don'ts

1. The Supplier shall not make unfair or misleading statements about the products and services of competitors.
2. Children shall not be employed at workplaces.
3. Forced labour shall not be used in any form.
4. The Suppliers shall neither receive nor offer or make, directly or indirectly, any illegal payments, remunerations, gifts, donations or comparable benefits that are intended, or perceived, to obtain uncompetitive favours for the conduct of its business with Tata Power.

Reporting Violations

The Supplier shall notify the Company regarding any known or suspected improper behaviour of other suppliers or employees relating to its dealings with Tata Power, by email to: cecounsellor@tatapower.com.

The same can also be raised through our 3rd party ethics helpline facility:

1. Email id: tatapower@ethics-line.com ; Website: www.tip-offs.com
2. Helpline numbers: Toll free - 0008001004382 and 0008001008277. Also accessible at normal domestic call rates within India: +91-11-71279005
3. Postal address: Deloitte Touche Tohmatsu India LLP
   c/o Arjun Rajagopalan, Partner (Ethics Helpline Services)
   19th Floor, 46 - Prestige Trade Tower, Palace Road,
   High Grounds, Bengaluru, Karnataka – 560001

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Section D.1.1: Annexure to GCC

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Appendix 3:

Safety Terms and Conditions

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Reason for Change	Date of Last Revision	Prepared By	Reviewed By	Approved by
Inclusion of Odisha Discom and periodic Revision	*10-Jan-2021-R4*	All Discom and CFT members	Debi Prasad Acharya (Head-Safety-Odisha Discom	Suresh H Khetwani (*Chief safety and Environment*)

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1.0 Objective:

The Objective of Safety Terms and Conditions is to apprise the Business Associates about various critical procedures of the Tata power Division/Discoms and the expectations from the BA to implement such procedures without fail. Certain terms and conditions are also mentioned to ensure a safe work atmosphere round the year. Refer Contractor's Safety Code of Conduct- *Document no TPSMS/GSP/ CSM/015*

2.0 Scope:

This procedure applies to all operating and project sites of The Tata Power Company Ltd and Group companies including new businesses like Electric Vehicle charging, Home Automation, Microgrid, Roof top solar etc. *This Code of Conduct also applies to all operating and project sites of four Odisha Discoms and New business based on mutually agreed timeline for implementation. R5*

3.0 Safety Organization & Responsibilities

3.1 Contractor Site Management and Supervision

Each Contractor will be responsible for fulfilling all statutory and safety requirements as per the laws of the land and not limited to Factory Act, Electricity Act, Electricity Rules and Regulations, Shop and Establishment Act etc.

Each Contractor shall provide at least one competent full-time safety supervisor for workforce of every 50 workers or less than that. When workforce ranges to 500, the contractor must provide at least one qualified safety officer (This may be subjected to change as per applicable act). Thus, for work force of 500 workers there will be one qualified safety officer and 10 safety supervisors. For every 500 additions in workforce, the contractor must add 1 safety officer and 10 safety supervisors. The Order Manager or Safety Department of the Tata Power Division /Discoms will review and approve the appointment of all safety officers and supervisors. The safety supervisors/officers will work with the guidance from Tata Power Division /Discoms Safety Department and align themselves with Tata power Division/Discom safety requirements.

For O&M related AMC activities, minimum one qualified safety officer to be deployed for each Division of the Discoms.

Qualified safety officer means he or she has completed PDIS or ADIS from a recognized institute.

Site Safety Officer/Safety Supervisor / Safety Coordinator shall be interviewed by the Order Manager/ Safety head of the Tata Power Division/Discom and then gate passes shall be issued if the interview is successful.

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Site Manager of Contractor/Subcontractor is responsible, and will be held accountable, for the safety of their own workforce as well as that of sub-contractors. He should also ensure that all equipment, materials, tools, and procedures remain in safety compliance at job site.

Responsibility of Site manager includes, but not limited to:

3.1.1 Holding officer/supervisors accountable for safety and actively promote safe work performance.
3.1.2 Participate in and cooperate with all safety program requirements to be implemented to meet Tata Power Division /Discoms safety objectives
3.1.3 Ensure timely reporting of safety incidents, near misses, unsafe acts, and conditions.
3.1.4 Identify the training needs of BA employees and maintain all safety training documents.
3.1.5 Provide Safety Performance Report at an agreed frequency.
3.1.6 Stopping of unsafe work (Acts and/or Conditions) immediately. Work to start only after corrective actions are implemented.
3.1.7 Ensure and participate in daily toolbox talk for all the jobs.
3.1.8 Ensure that only tested and certified tools and equipment are issued to the workers and being used at the site.

3.2 Contractor Supervisors and General Staff.

Contractors' site supervisors and general staff members in charge of job site functions such as field engineering, warehousing, purchasing, costing, and scheduling etc. are responsible for the safe performance of the work of those they supervise. They must set an example for their fellow employees by being familiar with applicable sections of the Site Safety program and ensuring that all site activities are performed with SAFETY as the primary objective.

Each site supervisor is responsible and will be held accountable for identifying, analyzing, and eliminating or controlling all hazards through implementation of an aggressive, pro-active Health, Safety and Environmental Program. Each supervisor will proactively participate in the Safety program by observing, correcting, and recording unsafe acts and conditions at plant / sites.

3.3 Contractor Workforce

3.3.1 *Contractors shall provide adequate quality and quantity of manpower as mutually agreed. (R5)*

3.3.2 All the contractor employees shall attend "SHE L0(Other than new business and Odisha Discom)/L1 Foundation Course in Safety". Depending on the critical procedure in job employees shall also be required to attend "SHE L2 course of critical/high risk operations". All Supervisors shall be required to attend "SHE L3 Supervisory Training". All the above trainings will be conducted by TPSDI/Skill development institute of Disco, or other equivalent institute approved by Tata Power.

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3.3.3 Contractor employees shall be required to attend any other additional training if suggested by Order manager or Site Safety Head. The cost of such additional training shall be borne by the Vendor.

3.3.4 Contractor / Vendor shall mobilize their manpower well in advance to complete the training through TPSDI/*Sill development Institute*.

3.3.5 *The Vendor / BA shall arrange or bear the conveyance and food expenses incurred during training of BA employees in Odisha Discom. (R5)*

3.3.6 The validity of the training L1, L2 and L3 is 3 years. *There will be competency assessment as Revalidation test in every three months for Tata Power Division and six months for Odisha Discom till one year from implementation of CSCC*.(R5) Those who fail in the competency assessment shall undergo training again.

3.3.7 Supervisors/Welder/Electricians/Line man /Fitters /Radiographers/ Riggers engaged by the contractor shall have valid competency certificates issued by authorized agency/Institute.

3.3.8 Contractor workforce must make safety a part of their job by following safety rules and regulations and by using all safeguards and safety equipment. They must take an active part in the Safety programs for the Site.

3.3.9 Every member of the workforce is expected to report for work without influence of any Drug/Alcohol. Failure to comply with this requirement shall result in immediate termination of employees under the influence of drug and alcohol plus show cause notice/penalty to the vendor.

3.3.10 All employees shall report hazardous conditions, practices and behaviours in their work areas and correct wherever possible.

3.3.11 Workforce is responsible for active participation in safety and health programs, suggestion systems, trainings and reporting of unsafe act/practices, Unsafe conditions incidents and injuries to their supervisors.

3.4 Vendor/Contractor/sub-contractor

3.4.1 Vendors/Contractor shall always comply with and ensure that their workforce comply with all site safety rules and regulations. Specifically, with applicable provisions of the Site Safety Management Plan and all statutory safety rules and regulations.

3.4.2 After receiving the work order/ purchase order vendor/contractor/bidder shall not appoint Sub-contractor without safety assessment of the sub-contractor through safety concurrence group Under Contractor Safety Code of Conduct. Penalty of 5% of contract value will be applicable to the contractor if subcontractor is appointed without the permission of SCG and without evaluation through CSCC process.

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4.0 Tools and Tackles(R5)

4.1 Tools & Tackles used to carry out the job shall be checked and inspected by Order Manager and safety Officer.

4.2 Vendor must submit a valid Certificate from Competent person under the Factories Act 1948 and State Factories Rule for all Lifting Tools and Tackles (like Hoist, D Shackles, chain Block, wire ropes etc.).

4.3 All Electrical Hand Tools must be tested for leakage of current by a person /agency authorized by Tata Power Division /Discoms. Electrical power must be taken though RCCB of 30mA. Electrical hand tools should not have cord more than 3 meters in length. If power source is at > 3 meters, extension boards with RCCB of 30 mA and ON/OFF switch, shall be used.

4.4 Removal or inclusion of tools any new tool /tackles / machinery / equipment at site should only be done with concurrence of the order Manager / Head Safety.

5.0 **Site Safety Rules and Procedures:**

The work in the safest possible manner can only happen when it has been carefully planned and all applicable procedures are followed. The Tata Power Safety Procedures are derived from Tata Power best practices and the applicable Government acts regulations. In each case, the most stringent regulation is used. All safety rules and procedures developed from time to time shall be mandatorily followed by the vendor and his employees while working at Site.

6.0 Critical safety Rules and Procedures: Following is the list of Tata Power's critical Safety Rules and Procedures. Contractor shall refer to approved Rules and Procedures for detailed requirements and ensure conformance

6.1 Lock Out and Tag Out Procedure.

This procedure is intended to be used for the protection of Personnel while servicing or performing maintenance on distribution network/ equipment / pipeline / vessel / process systems. This is a general procedure that shall be used as the minimum requirements for isolation of equipment, pipelines, machines, system from all possible sources of hazardous energy and / or material such as Steam, Hot Water, Compressed Air, any other process fluid / chemical energy /Mechanical energy or Electrical energy. For complete procedure kindly refer Procedure Document No. **TPSMS/CSP/LOTO/001**

6.2 Excavation Safety (Shoring and Sloping) Procedure

This procedure is developed to cover the safe practices required for shoring and sloping in excavation and trenching jobs. This procedure is developed to establish mandatory requirements for practices to protect personnel, property and equipment from hazards associated with above activities. For complete procedure kindly refer Procedure Document No TPSMS/CSP/EXS/002

6.3 Confined Space Entry Procedure:

This procedure outlines the steps required to perform the confined space entry and to protect personnel from the hazards of entering and conducting operations in confined spaces. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/CSE/003.

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6.4 Working at Height Procedure:
This procedure describes the rules and procedures to protect employees from the hazards of working at heights. This procedure is developed to cover the safe practices required for Working at Heights. This procedure is developed to establish mandatory requirements for practices to protect personnel from hazards associated in this area. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/WAH/004.

6.5 Heavy Equipment Movement Safety Procedure.
Heavy equipment lifting and movement is an activity involving loading, unloading, storage and movement from one place to another including lifting and erection or repairing of equipment with cranes or hoists. Material, machinery and equipment handling operations are being carried out by large capacity cranes and hoists, which make the job safer and faster. This procedure addresses the hazards and precautions associated with such equipment and their use. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/HEMS/005.

6.6 Mobile Crane Safety Procedure.
Mobile cranes are responsible for many incidents, injuries. Falling loads from mobile cranes pose a severe hazard to operators and nearby workers and property. Many types of cranes, hoists, and rigging devices are used for lifting and moving materials. To maintain safe, appropriate standards must be adhered to and only qualified and licensed individuals shall operate these devices. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/MCS/006.

6.7 Scaffold Safety Procedure.
This procedure is developed to provide information on the safe erection, use, dismantling and maintenance of access scaffolding in the workplace. It is developed to establish mandatory requirements for practices to protect personnel from hazards associated with erection, use and dismantling of scaffolds. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/SCAF/007.

6.8 Permit to Work Procedure.
Given the inherent hazards of the power generation and distribution industry, a significant number of TATA POWER operations and installations are critical. Work Permit (WP) System is an essential element in controlling the workplace risks in an effective manner. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/PTW/008.

6.9 Job Safety Analysis (JSA) Procedure.
This objective of this procedure is to have a task-based risk assessment process in place that identifies, evaluates and controls the risks associated with work activities, and as a result, prevents those involved in the task or those potentially affected by the task, from being harmed. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/JSA/009 REV 01.

6.10 Electrical Safety Procedure.

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The objective of these standards is to specify minimum mandatory requirements and advisory guidance for identifying and controlling hazards to ensure 'Zero Harm' regarding operation maintenance and testing of electrical equipment. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/ELEC/010

6.11 Fire Safety Management Procedure.

Objective of This standard is to specify the minimum mandatory requirements and advisory guidelines to ensure prevention of fire related incidents and managing / controlling their impacts if they do occur. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/ELEC/011

6.12 Hazard Identification & Risk Assessment (HIRA) Procedure(R5):

Objective of this procedure is to define guidelines for Hazard identification, Risk assessment and determination of controls. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/HIRA/012.

6.13 *Management Of Change (MOC) Procedure(R5)*:

The objective of this document is to establish the procedures necessary to ensure that HSE risks are managed to an acceptable level in Tata Power Management of Change (MOC) process. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/MOC/013.

6.14 *Pre-Start-up Safety Review (PSSR) Procedure*(R5).

Objective of this procedure is to provide guidelines for safe initial startup of a new facility or restart of a modified facility. The PSSR process verifies that the new/modified facility meets the original design and operating parameters. The intent is to prevent incidents caused by inadequate, incomplete, unauthorized design, construction, installation, and/or commissioning. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/MOC/014.

6.15 *Road Safety procedure(R5)*:

To provide Safety Rules for road travel management and safe usage of all types of vehicles viz. passenger/ commercial, owned/ hired by company, driven by employees or contractors. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/RSP/015.

7.0 General safety Rules and Procedure:

7.1 Lift (Elevator) Safety Procedure:

To provide safe operating procedure for taking control of lift car before entering and existing the pit of OTIS make elevators. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/LIFT/001**,

7.2 Working on conveyor belt Procedure:

This procedure is developed to cover the safe practices required for Working on live equipment and to protect personnel from hazards associated with it. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/CONV/003**

7.3 Batteries Handling & Disposal(R5)

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To provide procedure for recycling and / or safe disposal of used / waste batteries in compliance with all legislation. For complete procedure kindly refer Procedure Document No – ***TPSMS/GSP/HAZM/003***

7.4 **Material Handling and Storage Procedure**:

The purpose of this document is to provide procedures to assist the safe handling of materials (manual handling and mechanical handling). For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/MATL/004.**

7.5 ***Office Safety Procedure(R5):***

The objective is to provide a safe working environment to those working in office premise, who may be exposed to emergency situations and other chronic / cumulative risks that may arise due to various reasons of unsafe act, unsafe condition, fire and or pandemic crisis like COVID-19 etc. For complete procedure kindly refer Procedure Document No -***TPSMS/GSP/OFS/006***

7.6 ***Earth Leakage Circuit Breaker (ELCB) Testing Procedure(R5)*****:**

The objective of this procedure is to define the minimum requirements for testing of Earth Leakage Circuit Breaker (ELCB). For complete procedure kindly refer Procedure Document No - ***TPSMS/GSP/ELCB/008.***

7.7 ***Occupational Health & Safety Legal Compliance Procedure(R5):***

Objective of this procedure is provide guidelines for compliance of Occupational Health & Safety (OH&S) legal requirements and all ratified protocols and agreements are incorporated in Tata Power Safety Management System (SMS). For complete procedure kindly refer Procedure Document No - ***TPSMS/GSP/LEGL/009*****.**

7.8 ***Incident Reporting & Investigation Procedure(R5):***

Objective of this procedure is to outline the process for reporting, recording and investigating an incident, recommending corrective and preventive actions and to communicate the lessons learned to prevent recurrence of similar incidents. For complete procedure kindly refer Procedure Document No - ***TPSMS/GSP/IRI/011*****.**

7.9 **Contractor Safety Management Procedure.**

The purpose of this document is to engage with contractors in a way to create safe work environment for everyone working for Tata Power. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/CSM/015**.

7.10 ***Tree Trimming Procedure(R5):***

The objective of this procedure is to define guidelines and minimum requirements for Tree trimming. For complete procedure kindly refer Procedure Document No – ***TPSMS/GSP/TTRM/017***

7.11 ***Safe Lone Working Procedure(R5):***

Objective of this procedure is to lay down guidelines for reduction and safe managing of any additional risk arising from lone working. For complete procedure kindly refer Procedure Document No – ***TPSMS/GSP/LONE/019.***

7.12 ***Good Housekeeping(5S) Procedure(R5):***

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Objective of this procedure is to explain the meaning, importance and provide guidelines for implementation of Good Housekeeping(5S) at workplaces across organization. For complete procedure kindly refer Procedure Document No – ***TPSMS/GSP/GHK/022***.

7.13 Personal Protective Equipment(R5):

This procedure describes the basic requirements, applicability, minimum specifications of Personal Protective Equipment (PPE). For complete procedure kindly refer Procedure Document No – ***TPSMS/GSP/PPE/023.***

7.14 Process Safety Management Procedure(R5):

The objective of this document is to provide a standardized & uniform guideline to implement Process Safety Management in Tata Power, its JVs, and subsidiaries to prevent or minimize the consequences of releases of toxic, flammable, pressurized or uncontrolled chemicals/Steam/Water or any other material which may result in toxic, fire, explosion, burn or flood like situation. For complete procedure kindly refer Procedure Document No – ***TPSMS/GSP/PSM/024***

The above procedures will be updated time to time and the updated version of the procedures as well as any additional critical procedure will be available on official website of Tata Power (www.tatapower.com) for your reference.

8.0 **Training and Capability Building**.

Safety Training and capability building of workforce is a major component of safety management program. All training required must be provided and documented as specified by Tata Power and Indian Regulations. Tata Power Division /Discoms Safety department will audit contractors training and related documentation to assure its adequacy.

8.1 Tata power Odisha Discom Site Safety Orientation.R5

All Tata Power contractor and subcontractor workforce is required to attend Site Safety Orientation Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry. This Safety Orientation Course will be for duration of minimum half day. The information provided during the orientation will include, but is not limited to following:

8.1.1 Job rules, personal safety, and conduct
8.1.2 Hazard's reporting
8.1.3 Reporting of injuries
8.1.4 Emergency procedures
8.1.5 Safety Activities and Program including disciplinary measure and incentives.
8.1.6 Critical safety procedure relevant to the job

8.2 **Capability Building:**

8.2.1 All Tata Power contractor and subcontractor workforce is required to attend L1 Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry.

8.2.2 Appropriate practical training such as SHE L1, L2& L3 is given to ensure that a jobholder, either supervisor or worker, is competent to do his/her job safely. The skill training is provided through TPSDI, and other agencies authorized

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by Tata Power on the list of 15 critical Safety procedures mentioned under safety procedures. Duration of course is as specified by Division/Discom

8.2.3 Contractor shall ensure that concerned workmen are provided with adequate training before he/she is allowed to execute the work. An evaluation test will be conducted after the completion of the training. Those employees who meet the minimum required competency will be provided with Certificate (Card), which will be valid for 3 years, post which the workmen have to reappear for assessment.

8.2.4 If the workman is not able to qualify the assessment, he/she will be given 3 additional attempts to clear in 3-month time failing which he/she will not be allowed to work in the Division /Discoms.

8.2.5 *After expiry of Certificate or Training /Competency Card again one day recertification of L1, L2 and L3 skill training will be provided. R7.*

8.2.6 Quarterly /Half yearly(For Odisha and New business) Revalidation Test - "SHE L1 Revalidation test" will be conducted for the contractor's employees to revalidate their safety awareness and knowledge.

8.2.7 Order Manager and Safety In charge of the Division/Site /Plant will conduct a Competency Assessment of all workforces, going to be deployed at site / plant for high-Risk job.

8.2.8 *The Contactor shall bear the conveyance and food expenses of his staff for attending training sessions and capability building sessions in new business-like Odisha Discom.*

8.2.9 *The Contactor shall bear the entire cost of L1/L2/L3, the costs towards training, salaries/wages, boarding and lodging of his staff for attending training sessions and capability building sessions. These trainings are offered on nominal chargeable basis payable by Contractor and rates shall be decided by TPSDI from time to time in case of training trough TPSDI. Generally, L0 is of one day, L1 is for 2 days for each critical procedure and L3 is for one day. Around Rs 700+GST is approx. cost /Day/Candidate. -R5*

8.2.10 *Competency assessment of all critical workforce to be carried out for all who has taken L2 training. R5*

9.0 Recognition to the Prior Learning in Safety-R5

If "Order Manager" recommends and "Head of the Safety Department of Discom" is satisfied with the safety knowledge and competency of the employee of contractor, a test may be conducted by Tata power Skill development Institute/ other recognized institute to assess the prior learning in safety. If employees of the contractors pass in such test, he will be exempted from appearing in SHE L1 training. *This assessment is on nominal chargeable basis and rates are decided by TPSDI from time to time.*

10.0 **Safety performance retention(R5) and Safety Performance Evaluation:** *A certain percentage of the bill value will be retained against every running bill as safety performance retention. The amount will be released with the last invoice or every six-month based on Safety Performance Score of contractors. This is as per CSCC Document no TPSMS/GSP/ CSM/015*

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This safety retention shall be waived for Contractors who have either submitted a Contract Performance Bank Guarantee or have a retention from each running bill for an amount not less than 10% of each bill subject to the express undertaking / understanding that if there are any deductions required to be made for safety non-performance as per the Safety Performance Score, then Tata Power shall recover any such deductions against safety non-performance directly from the monthly bills / final settlement as the case may be failing which it shall be within its right to recover such sum from accounts payable or the CPBG or the retention of the Contractor available with Tata Power for the said contract or any other contract between the Contractor and Tata Power.

11.0 Pre-Employment and Periodic Medical check-up:

Contractor shall arrange to conduct a pre-employment and periodic medical check-up for its entire workforce by Tata Power medical officer or Tata Power authorized medical officer. The contractor shall be able to produce the certificate prior to the employment. The contractor shall also organize to conduct periodical medical checkup (six monthly) for the following category of employees:

- Drivers (Check for Vision & Hearing)
- HEM Equipment Operators (Check for Vision & Hearing)
- Workforce working at Height (Check for Vision, Hearing, Vertigo & Height Phobia)
- Workforce Handling the hazardous substances - Coal, ash and chemicals (Chest X-ray and Lung Function T)
- Workforce in high Noise area (> 90 Decibel), Check for Hearing
- Workforce handling radiography equipment for conducting NDT.
- Workforce, working in specific areas requiring specific medical attention should conduct the medical tests test as laid down in the respective Site Safety Management Plan.

12.0 Other Conditions:

12.1. The manpower/vehicles/Tools & Tackles/Equipment provided shall be as per mutually agreed SLA.
12.2. No Supervision No work policy should strictly be followed.
12.3. Test Before Touch must be ensured every time a job is being carried out in electrical network.
12.4. HIRA /JSA as per the job scope must be prepared in detail and submitted along with Site Safety Plan by the successful bidder.
12.5. Personal protective equipment (PPE) must always be checked before use to ensure that they are in good condition and clean. Replace them if necessary.
12.6. All relevant PPE shall be provided by the vendor while working at the site.
12.7. Housekeeping shall be maintained all the time while execution of work. All the unwanted material shall be removed from the site at the end of the day's work. Old/damaged parts if taken out of the system shall be kept at

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identified placed and it shall be shifted to scrap yard or disposed of as per instruction of order manager.

12.8. Site Safety Plan shall be prepared by successful bidder along with order manger. Appendix 1 to be filled by successful bidder and submitted to Tata Power safety in-charge, before mobilization of team at site and start of the work.

12.9. The Owner or Proprietor of BA must visit worksite at least once in a month and meet Order Manager every month. In case of incidents, the Owner or Proprietor of BA is required to attend Time Out Meetings to understand the gaps that contributed to the incident.

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General Safety Conditions for various contracts Specific to Odisha Discom(R5)

13.0. Safety Conditions for maintenance of STS (Sub Transmission System) Network.

A BA awarded a major contract work of maintenance of sub – transmission network in area of a power system will be required to fulfil the following conditions:

- Availability of Discharge Rods - Minimum 6 Nos. in each maintenance vehicle, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each Maintenance Vehicle, in good and working condition and defective or non-standard neon testers are removed from service.
- Electrical hand Gloves - Minimum two sets of 33 KV and two sets of 11 KV in maintenance vehicles.
- The BA linemen must be having required ELBO certification for the voltage level involved.
- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute Safety Staff for managing safety in worksites. In case the BA has been awarded work in more than one area power system, then the following safety structure will be adopted.
- Safety manager and Safety engineer must be having PDIS or ADIS.

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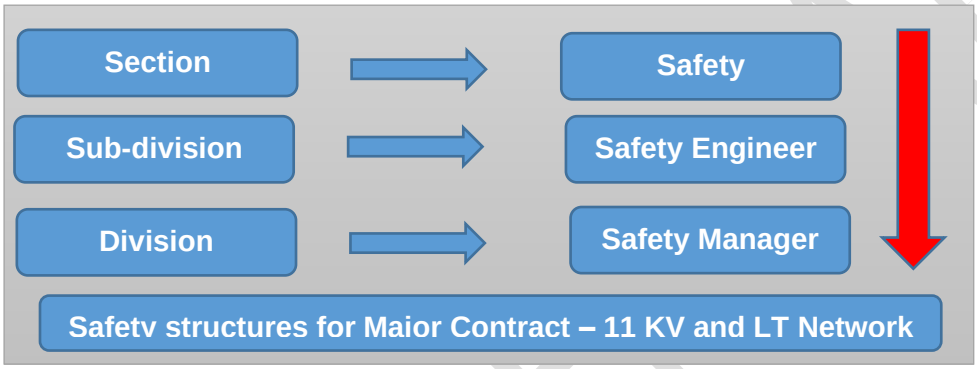
14.0 Safety Conditions for maintenance of 11 KV and LT Network.

A BA awarded a major contract work of maintenance of 11 KV and LT Network in area of a power system will be required to fulfil the following conditions:

- Availability of Discharge Rods - Minimum 6 Nos. in each PSS/FCC and maintenance vehicle, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each PSS/FCC/ Maintenance Vehicle, in good and working condition and defective or non-standard neon testers are removed from service.
- Electrical hand Gloves - Minimum two sets of 33 KV and two sets of 11 KV in each PSS/Maintenance vehicles and two sets of LT hand gloves at each FCC.
- The BA linemen must be having required ELBO certification for the voltage level involved.
- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not engage new workman without training and issue of ID card.
- PSS operator shall not be involved in maintenance activities.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- BA to ensure that all LT complaints are routed through Call Centre and recorded in FCC. Rectification of fault shall be done only after call centre logging and with the knowledge of BA supervisor.
- No one will work alone or unsafely under public pressure or otherwise.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.

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- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute Safety Staff - One safety supervisor per section, One safety engineer per sub-division and one safety manager per Division Safety manager and Safety engineer must be having PDIS or ADIS.



15.0 **Safety Conditions for the major contract work in Civil Projects:**

A BA awarded a major contract work of / in civil project will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.

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- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall refer Construction Safety Manual of the Discom for details.
- BA shall ensure to depute a Safety Supervisor (for workforce up to 100 at site) / a safety engineer (for workforce up to 250 at site) / safety manager (for more than two safety engineers) for managing safety at the project site. In case the BA has been awarded more than one major contracts, then the following safety structure will be adopted.
- Safety Engineers and Safety Managers must be having PDIS or ADIS.



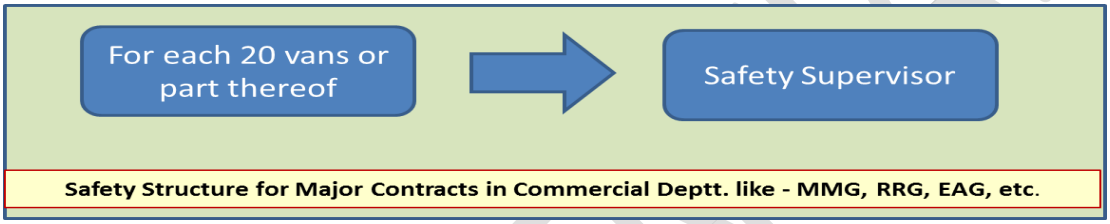
16.0 **Safety Conditions for the major contract work in Commercial Department like - MMG, RRG, EAG, etc.:**

A BA awarded a major contract work in meter management group & energy auditing group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.

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- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute a Safety Supervisor for managing safety at worksite.
- The BA for the RRG work shall depute one Safety supervisor.



17.0 **Safety Conditions for Major Projects in Distribution Network**

A BA awarded a major Projects in Distribution Network shall be required to fulfil the following conditions:

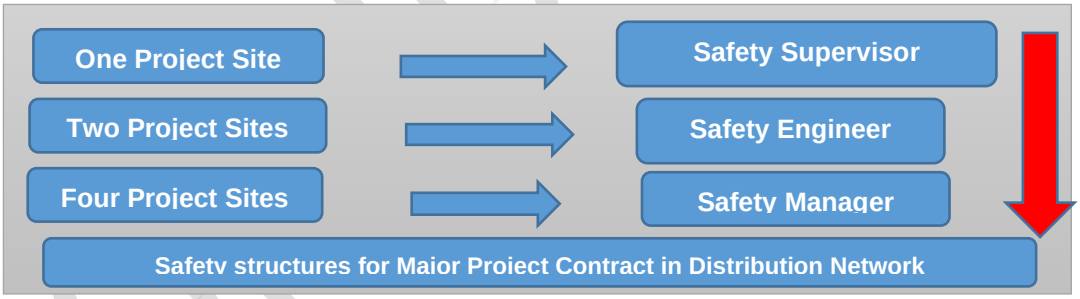
- Availability of Discharge Rods - Minimum 6 Nos. for each project site, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each project site, in good and working condition and defective or non-standard neon testers are removed from service.
- Electrical hand Gloves - Minimum one sets of 33 KV, 11 KV and LT in each project site.
- The BA linemen must be having required ELBO certification for the voltage level involved.
- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.

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- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.

Sr. No	Type of Audit	Frequency
1	Tool Bag and PPE audit	Weekly
2	First Aid Box Maintenance Record	Fortnightly
3	Fire Extinguisher Record(Applicable for the BA involved in major construction works and have storage of flammable material at worksite)	Monthly
4	Safety Talk Register	Weekly
5	Site Safety Audit	Daily

- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute Safety Staff for managing safety in worksites. One safety supervisor per project site or 100 persons, one safety engineer for 2 project sites of 250 persons, and one safety manager for four project sites or 500 persons.
- Safety manager and Safety engineer must be having PDIS or ADIS.



18.0 **Schedule of Safety Audits by BA Safety Staff**

Safety Undertaking of BA by way of Affidavit

I_____ s/o_____R/o_____ (AUTHORIZED REPRESENTATIVE/PARTNER/DIRECTOR/PROPRIETOR) of M/S _____(name of company/firm)__ having its office at (Complete address of Company), authorized vide power

of attorney dated ------/Board resolution dated----/letter of authority dated----, hereinafter referred to as **Contractor [or Business Associate (BA)]** which expression shall, unless it be repugnant to or inconsistent with the meaning or context thereof, be deemed to include its heirs, executors, administrators, and assigns do hereby affirm and undertake as under :

1. The present undertaking shall remain in force from the date of execution of contract and shall be valid till the date of termination of the said contract by either party. The undertaking is binding on me (contractor) as well as my sub-contractor and its employees, representatives etc.
2. That I (the contractor) will be responsible and liable to comply and abide by all the safety rules, instructions and regulations as may be specified and laid down by the Discom to achieve its goal of Zero for on-site incidences.
3. That the Contractor shall be fully responsible for ensuring occupational health and safety of its employees, representatives, agents as well as of its subcontractor's employees, at all times during the discharge of their respective obligations under the contract including any methods adopted for performance of their tasks / work.
4. That Contractor shall ensure ,at its own expense to arrange for and procure, implement all requisite accident prevention tools, first aid boxes, personal protective equipment, fire extinguisher, safety training, Material Safety Data Sheet, pre-employment medical test, etc. for operations & activities including as & when so specified by Discom specifically. , failing which Discom shall be entitled, but not obliged, to provide the same and recover the actual cost thereof from the Contractor's payments.
5. That the Contractor shall engage adequate and competent Safety – Supervisor / Engineer / Manager / Skilled persons at site as per the Para 5 (Qualification and experience of safety personnel) and Annexure 3 of Contract Safety Management.
6. That the Contractor shall engage the competent Site – Supervisor with each group of workers for safe and correct workmanship, proper co-ordination of material and site work as per contract.
7. That the Contractor shall immediately replace supervisor in case it is found to be not up to the level of skill and experience required, but any such replacement shall be only with the prior concurrence of the Discom representative.

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8. That the Contractor and its subcontractors shall abide by all the safety guidelines as per Safety Manual, Contract Safety Management and other guidelines issued from time to time by Discom during the contract period.
9. That in case the Contractor and/or any of its Subcontractor fail to ensure the compliance as required in terms of this undertaking the Contractor shall keep and hold Discom / its directors / officers / employees indemnified against any / all losses / damage / expense / liability / fines / compensation / claims / action / prosecutions or the like which might be suffered by Discom or to which Discom might get exposed to as a result of any breach /wilful negligence /deliberate default on the part of the Contractor /Subcontractor in complying with the same. Contractor shall also furnish any press release, clarification etc. if sought by Discom for any near miss or safety violations, accidents, which are attributable to fault of Contractor.

DEPONENT

VERIFICATION

Verified at ……on this _Day of _____20__ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

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ANNEXURE TO

Appendix 3: Safety Terms and Conditions

(Document No - **TPSMS/GSR/STC/009 REV 05**)

(Excerpts of Tata Power Safety Code of Conduct as relevant for Safety Terms & Conditions)

(A) Definitions

- **Order Manager/Engineer in charge:** Order Manager/Engineer in charge is the Tata Power-Division /DISCOM representative, who has the ownership of the given job.
- **Site Safety Management Plan**: It is the safety plan agreed between Contractor and Tata Power-Division/DISCOM. It will contain the entire job specific safety requirement and will be signed by the contractor.
- **Contractor/Business Associate/Vendor (BA)**: An individual or a company that provides services to Tata Power-Division/DISCOM under a signed contract.
- **Emergency:** It is a serious, unexpected, or dangerous situation requiring immediate action, which may result in *loss of life,* loss of revenue/property, business discontinuity. In case of Emergency, services may be procured by selecting the qualified vendor based on the vendor category without the safety bid evaluation and approved by adequate authority of MB level or above.
- **Expert Service jobs:** Jobs which needs expert services of contractor which does not involve direct exposure to the potential risk or work which involves only supervisory work such as expert for AI-ML, expert for transmission and distribution network, expert for civil works, expert on transformers, expert for PSCC, expert for equipment overhaul etc.
- **CEO/Chief/Head of division/Unit/Utility**: Business in charge who is overall custodian of the Tata Power-Division/DISCOM.
- **High Risk Jobs**: A Job or its activities are considered as Very High or High Risk when Order manager apply the "Tata Power Hazard Identification and Risk Analysis" procedure and found safety risk associated with are under Very High or High category. Indicative lists of jobs are given in appendix 14 of this document.
- **Medium Risk Jobs:** Jobs or its activities are considered as medium risk when Order manager apply "Tata Power Hazard Identification and Risk Analysis" procedure and found the same as Medium Risk.
- **Low Risk Jobs:** Any job or its activities are considered as Low or Very low risk while Order manager calculated it by applying "Tata Power Hazard Identification and Risk Analysis" procedure and found it under Low or Very Low category.

(B) **Safety performance retention(R7):**

A certain percentage of the bill value will be retained against every running bill as safety performance retention. The amount will be released with the last invoice or every six-month based on Safety Performance Score of contractors. The retention amount will be calculated based on contract value as below. (R7)

Risk Category-(R7)	Contract Value	Retention Amount (%)
Very high/High risk job/ Medium Risk jobs	Up to 10 Lakhs	2.5
Very high/High risk job/ Medium Risk jobs	10 – 50 Lakhs	2
Low/Very Low Risk jobs	10 – 50 Lakhs	1
Very high/High risk job	0.5 to 10 Cr	2
Medium Risk jobs	0.5 to 10 Cr	1.5
Low/Very Low Risk jobs	0.5 to 10 Cr	1
Very high/High risk job	>10 Cr	1.5
Medium Risk jobs	>10 Cr	1

This safety retention shall be waived for Contractors who have either submitted a Contract Performance Bank Guarantee or have a retention from each running bill for an amount not less than 10% of each bill subject to the express undertaking / understanding that if there are any deductions required to be made for safety non-performance as per the Safety Performance Score, then Tata Power shall recover any such deductions against safety non-performance directly from the monthly bills / final settlement as the case may be failing which it shall be within its right to recover such sum from accounts payable or the CPBG or the retention of the Contractor available with Tata Power for the said contract or any other contract between the Contractor and Tata Power.

(C) **Safety Performance Evaluation & Responsibility of Business Associate / Contractor:** During the time of job execution, regular site inspection will be carried out by the Tata Power-Division / DISCOM officials to evaluate monthly safety performance of the contractor and monthly score will be maintained by the Order Manager. Violations will be dealt as per **CSM F12 Safety Violation Penalty Criteria**.

1. During the progress of the work, concerned site Supervisor/Engineer/Safety representative will visit and inspect the work site regularly and evaluate the safety performance of the contractor based on matrix **Appendix 13** and apply the Consequence management policy/Penalty criteria as applicable.
2. The evaluation criteria include Lead Indicators such as percentage of workers trained in TPSDI, inspection of critical equipment. Lag indicators such as Fatalities, LWDC and man-days lost.
3. In case of job stoppage due to safety violations / unsafe observations at the site, no time extension from PO completion date shall be given to the contractor, if such delays are attributable to contractor.
4. In case of fatality, limb loss or loss of property, vendor must pay for liability, legal, statutory, and additional mutually agreed settlement charges imposed by the appointed committee by Division Chief/CEO. This charge is over and above the retention amount. The committee will finalize penalty amount based on factors such as advice by statutory authorities, contract value and impact of accident etc.

5. Order Manager, Head of Business and functional Chief have the authority to terminate the contract as per **CSM F12 Safety Violation Penalty Criteria** Through contract department.

(D) Other Appendices are attached,

Appendix 6: CSM F6 - Safety Competency Assessment Form (Template).
(This is to be filled by Bidder and submit to Tata Power as part of bid submission).

Appendix 8: CSM F8 - PPE requirements-(R7)

Appendix 9: CSM F9 - Site Safety Management Plan / Method Statement (Template)

Appendix 12: CSM F12 - Safety Violation Penalty Criteria

Appendix 13: Checklist To Be Used During Site Visit

Appendix 14: Indicative List of High-Risk Jobs

---xxx---xxx---xxx---

Appendix 6: CSM F6 - Safety Competency Assessment Form (Template)

Name of the Vendor/Bidder:
Name of the Sub Vendor (If job is given to Sub Vendor):
Description of the Job:
Request for Quotation (RFQ) No.:

Vendor/Bidder to mandatorily provide the below safety competency related information:

1. Proposed Manpower Deployment Schedule : -

Type of manpower	Qualification	Experience	Month 1	Month 2	Month 3	.....
Project /*AMC Manager(R7)*						
Site In Charge						
Safety Manager						
Safety Officer						
Supervisors						
Technicians						
High Skilled workmen						
Skilled workmen						
Semiskilled workmen						
Lineman						
Helpers						
Drivers						
Unskilled						
Others(R7)						

Instruction to Bidders:

i. Indicate the overall site manpower deployment schedule as above
ii. Indicate direct or subcontracted employees by using color code given below:
Direct Bidder Employee – Green
Partly Direct / partly Subcontracted – Yellow
4.3.5 **Subcontracted – Red** *If subcontractor detail is not available at stage of Bid evaluation, then this can be agreed with Order manager or Engineer in charge before deployment Ensure that all sub-contractors follow the Tata Power Safety Procedure and agreed CSM F9 Site Safety Management Plan*.**R7**

iii. Against each category, indicate minimum educational qualification and work experience

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iv. Add rows to include other specialized manpower, if any.
v. Extend columns to cover the entire duration of the proposed contract.
vi. If the operation is in shifts, then indicate shift in charge and / or safety officers required for each shift operation.

2. List of Tools, Tackles, Machines and Equipment: -

Bidder/ Vendor to provide the list of tools, tackles, equipment **to be used during the job / project execution**. Bidder/Vendor to ensure that all the lifting tools and tackles, pressure vessels are duly certified by the competent person authorised by the Chief Inspector of Factories of the respective state prior to start of the job

Sr. No	Description of Tools / Tackles	Capacity / Rating	Quantity	Make	Year of manufacture	Remarks
1						
2						
3						
4						
5						
……						

3. Safety Records:

Bidder to provide the details of fatalities and lost workday cases (LWDC), occurred in last three years (data to be provided for the last completed FY and preceding 2 years).

Description	Safety Data for current and Last 3 Years			
	Current Year	Year 1 (Last FY)	Year 2	Year 3
		20__ - __	20__ - __	20__ - __
Fatalities (Nos.)				
Lost Workday Cases (Nos.)				

In case of no fatalities, LWDC during any year, the form may be filled stating NIL against the respective year. Bidders are encouraged to also submit the RCA / incident investigation reports and the learning's implemented out of the above reported incidents

4. Job Safety Plan/ Method Statement:

Bidder to provide / enclose a detailed Site/Job Safety Plan along with a Method statement detailing the execution philosophy (how the bidder intends to execute the Job/Project), identifying all key activities which are required to be performed by the contractor at Site.

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Bidder to also list down all high-risk activities and provide the Hazard Identification and Risk Assessment (HIRA) for all such high-risk activities involved in the site work.

(Use Method Statement template attached as Appendix 9)

5. PPE Requirement -R7

Division/DISCOM Requirement	Bidders Response
The Bidder/Vendor shall ensure that all PPE of Approved standards as per CSM F8 – PPE Requirements shall be always available and shall be used by his employees with no exception whatsoever. Bidders to also ensure Standard PPE matrix of Tata Power to be followed for all activities.	
10% Buffer stock of PPEs to be provided by bidders at each circle to meet any contingency	
Bidder will ensure that sample PPEs to be submitted/approved by Safety Department along with EIC at the time of submission of Safety bids for evaluation In case bidder manpower found using substandard or any PPEs which are not approved by the Tata Power-Division /DISCOM representative, then Tata Power-Division /DISCOM will provide the same to manpower deployed at the cost of bidders.	

6. ***Vehicle Deployment*:** Bidders to provide details of all vehicles deployed during execution of work-(R7)

S. No.	Vehicle No.	Vehicle Type	Location	EV/CNG/Diesel/Petrol	Year	Whether CNG endorsed on RC

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7. ***Crane Deployment***-(R7)**:** Bidders to provide details of crane to be deployed during the execution of work as and when required. Bidders to provide approved new gen crane ACE Model SX150, ACE FX150 and Escorts Model TRX 1550.

Sl No	Crane No	Location	Year

8. ***Training Records***-(R7)**:** Bidders to provide training records of employees deployed for the execution of work during last one year. These training includes OHS (Occupational Health and Safety) Training, Training on SOP/Work Procedures and Medical Emergency trainings imparted at their own facility, cost, and expenses. Bidders to provide the following details:

Tata Power-Division /DISCOM **Requirement**	**Bidders Response**
Training records of employees at their own facility, cost, and expenses for last one year	
Training facility available with Bidders	
Future road map for enhancing the competency of workforce	

9. ***Rewards and Recognition***-(R7)**:** Bidders to provide the details of process deployed in their organization for sharing and resolution of safety concerns raised by their employees. Also, bidders to provide the details of Rewards and Recognition process in their organization for safety to encourage the morale of their workforce.

10. **Management System Certification: -**

Sr.No	Certification	Yes / No	If Yes, Year of Certification	If No, Target date for Certification
1	ISO 9001			
2	ISO 14001			
3	ISO 45001			
4	Any other (Specify….)			
Note: Please attach certificates to support above. In case not accredited for above but applied for, application letters may be attached.				

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Appendix 8: CSM F8 - PPE requirements-(R7)

The Contractor shall ensure that the following PPE of Approved standards shall be always available and shall be used by his employees with no exception whatsoever. • PPE shall be conforming to BIS/DGMS/DIN specifications, in good condition and shall be comfortable to his employees, when used. This is indicative. For better clarification refer PPE procedure-***TPSMS/GSP/PPE/023.*** as per safety terms and condition Appendix 3 CFM 3 in detail. R7

PPE Requirement

1	All contractor's employees at site	Safety Florescent Jacket (orange color), Safety helmet & safety shoes with composite or steel toe cap
2	Workers mixing asphalt, cement, lime / concrete	Safety goggle & protective Hand gloves and footwear, Nose mask.
3	Welders / Grinders/Gas cutters	Welding screen/goggles, safety shoes, leather hand gloves, aprons, leg guard
4	Stone breaker	Protective goggle, hearing protection, anti-vibration hand gloves and Protective clothing.
5	Electricians / Linemen	Rubber hand gloves *with correct voltage rating and expiry date normally one year from Manufacturing date-(R7)* & Electrical resistant shoes, Safety helmet with induction strip to alert about presence of voltage for those linemen who climb the poles or work on electrical equipment
6	Workers working at a height of 1.8 Meter or above.	Double lanyard full body harness, fall arrestor and safety net made of reinforced nylon fiber ropes firmly supported with steel structures, Work positioning attachment

PPE Type and Testing Frequency

Sl. No.	Name of PPE	IS / EN Standard	Testing Frequency	Remarks
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298 (Part-2)	Monthly and visual check every day for any crack or damage in the leather or sole.	

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02	HDPE Safety helmet with chin strap and ratchet type for adjustment for non-Electrical work	IS:2925-1984	Monthly and visual check every day for any crack in shell.	
03	Full body harness (Safety belt)	EN 361	Monthly and visual check every day of the bends and the harness.	
04	Electrical Safety Gloves	EN: 60903 CE marked	Weekly and visual check for any crack and blow test before every work.	Manufactured not beyond 12 months.
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	Monthly and visual check every day for any crack in shell.	Clear acrylic visor attached with safety helmet.
06	Fireproof jacket for chest protection		Monthly and visual check every day.	
07	Safety helmet with induction Strip for linemen and working for electrical work-Class E	EN 397/2012	Monthly and visual check everyday	Induction Strip alerts presence of voltage
08	Shorting clamps, crocodile clamps, Discharge Rod and Neon tester		Monthly and visual check everyday	For discharging the residual voltage and test before touch

Pictorial View of PPEs for reference purpose

Sl. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part-2) and with test report of electrical resistance.	

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02	HDPE Safety helmet with chin strap and ratchet type for adjustment for Nonelectrical work and electrical work	IS:2925-1984/ EN 397/2012	
03	Full body harness (Safety belt) The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358 : 2000 IS: 3521:1991/2002	
04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	
06	Fireproof jacket for chest protection		
08	Reflective jacket to each workman	As per Tata Power standard	

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These pictures are indicative. Actual product may vary.

Note:

1. Any other Personal Protection Equipment required beyond above list will be according to BIS or EN Standards.
2. All Personal Protection Equipment will be checked by the engineer in-charge or SAFETY group of company.
3. Safety Representative of the BA must maintain the record of the availability, condition and checking of the PPEs.
4. All tools required as per the contract must be according to respective IS / EN standards.
5. Company may revise or add the above list of PPE and their specifications as and when feel necessary. The information about new specifications /models will be circulated by the Engineer In-charge (EIC), which shall adhere by the business associated in the shortest possible time. The EIC shall issue a memo / instruction to BA with timeline for implementation. Any delay will be treated as non- compliance / safety violations.

Appendix 9: CSM F9 - Site Safety Management Plan / Method Statement

Site Safety Plan / Method Statement (Template)

This Method Statement describes the specific safe working methods which will be used to carry out the described work. It gives details of work procedure with control measures to counter health and safety issues related to this work. The listed content of this Method Statement can be changed/modified subjected to job scope / specifications, but task specific method statement once finalized & approved, that should not be modified during work execution without permission from the approving authority.

Project/Job Name		
Scope of work: -		
Drawing References: -		
Detail of Sub contractors involved: -		
Method Statement Prepared By: - Designation: - (e.g., Site Manager)	Signature	Date

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1.0 Introduction (*Describe purpose of the work, give details of type and scope of work being carried out)*

2.0 Location of Work *(Give site address and precise location on site where work is to be carried out)*

3.0 Safety Document /Specific Approval Required (Details of any safety documents or specific approval i.e., Client specific approval required to undertake the work)

5.0 Role & Responsibilities of Personnel/Parties Involved in activities: Clearly define roles and responsibilities of all personnel involved in activity i.e., Site management staff including subcontractors' staff, Project Manager/Site Manager of principal contractor, Sub Contractor Site Manager, Project Engineer, Safety officer, Competent Supervisory Staff etc.)

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6.0 Working/Activity Description: - *It is important that all operatives should have clear idea of those operational sequences and responsible supervisor must verify their competency prior to their engagement in operation.*

6.1 Pre-Working Checks

6.2 Resources (Equipment, tools including manpower) Details *i.e., Equipment and Tools, specific operational equipment, test kits, lifting resources, Details of materials to be used in operation, including any reference to COSHH assessments in case of use of any chemicals, Details of the manpower allocated to the task, e.g., titles, qualifications, competences, direct manpower, contractors. Details of plant, tools, and equipment to be used for the work, including the availability of relevant statutory documents, checks or inspections etc. Details of fencing, barriers, cones, chains, dangers notices, warning signs etc.*

Tools required for work:

Sr.No	Tools /Equipment /Machine	UOM	Required Qty.	Remark
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

6.4 Operational Sequence of work*: - Full description of the work, setting out the methodology in a sequential manner, including any reference to any identified operational restraints. Also refer here sec. 5.0 responsibilities part for every step of work sequence).*

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S. No	Activity	Details of job sequence	Risk Involved	Control Checks
1.				
2.				
3				
4				
5.				

6.7 Final Checks & restoration of work area after completion of work: *Those checks to be carried out by responsible supervisor in witness of his line hierarchy by use of specific checklist of certain operational checks and once those completed satisfactory, PTW (if applicable) to be closed and isolation arrangements to be restored by removing barricades/cautionary tags.*

7.0 Task Specific Hazards: - *Refer to Task Specific Risk Assessment and attach in appendix*

Attachment: - Specific Risk Assessment

In addition, please provide below control measures in risk assessment *(as applicable).*

Fall Protection Measures: (Where Work at height cannot be avoided)	
Control Measures for Electrical Hazards	
Others Hazard if any (please provide details)	

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Hazardous Substances to be used in job: (Attach MSDS if required)							
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N

7.0 Emergency Provisions: *Relevant operational possibility of a programme in the case of emergency situation i.e. electrical supply restoration. In addition, emergency response provisions i.e., first aiders, firefighting, and first aid arrangements, nearest onsite/offsite emergency response also to be considered during emergency planning.*

8.0 "5S issues" / Waste Disposal/ Housekeeping and Environmental issues: *Details waste disposal processes and or housekeeping activities, Details of environmental impacts and control measures.*

9.0 Personal Protective Equipment (PPE): *Tick on PPE requirements for the task/Job*

Safety Helmet / Hard Hats		*Safety Shoe / Safety Boots*	
Gum Boot		*Double Lanyard Safety Harness with work positioning attachment*	
Electrical Hand gloves		*Other hand gloves*	
Eye protection		*Respiratory protection*	
Ear Protection		*Electrical Arc flash suit*	
Chemical resistant suit		*Reflective Jackets*	
Any Other		*Any Other*	

10.0 First Aid facilities and Nearby Hospitals Details

- Name of On Site First Aider
- First Aid Box Location
- Location of nearest hospital

11.0 Occupational Health, Fitness and COVID-19 related Preparedness:

• Please give a brief writeup / methodology of your organization's plan to avoid impact of the COVID-19 pandemic at Tata Power working site. • Please give brief details of occupational health and hygiene related interventions planned by your organisation to ensure good health and fitness of workforce at Tata Power site.

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Appendix 12: CSM F12 - Safety Violation Penalty Criteria

Major Violations and Escalation matrix-(R7)

Consequence of safety violation observed not related to incidents or accidents		Violations				
Sl. No.	**Safety Violation**	**1st**	**2nd**	**3rd**	**4th**	**Subsequent violation**
1	Working without required PPE such as Helmet/gloves/safety shoes/Safety harness etc.	A	B	C	D	Will Attract the same penalty as 4th violation
2	Working without proper tools and tackles	A	B	C	D	
3	Poor or bad condition of Crane/Hydra/Vehicle and/or Incompetent driver and/or helper).	B	C	D	E	Termination of Contract and blacklisting after repetition of violations (3 to 4 times as the case may be)
4	Improper Working at Height	B	C	D	E	
5	Untrained /unauthorized workman engaged in high-risk jobs	B	C	D	E	
6	Violation of SOP or WI or LOTO	C	D	E		
7	Working without PTW or LC / Without authorization / Without creating Safe Zone	C	D	E		

Legend	Action to be Taken	Responsibility	Penalty (INR)	Repeat Violations
A	Levy of Penalty	Order manager / EIC	5000	The no. of repeat violations shall be calculated cumulative during the contract period, not on a monthly basis
B	Memo to BA and Levy of Penalty	Order manager / EIC	10000	
C	Memo to BA and Levy of Penalty	Order manager / EIC	25000	
D	Memo to BA and Levy of Penalty	Order Manager / EIC	50000	
E	Memo to BA, Levy of Penalty, Termination of Contract, Blacklist	Order Manager / EIC	100000	

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Other Violations and Penalty

Penalty shall be imposed on the contractors under the following circumstances for breaching the contractual agreements. The list is not exhaustive, but indicative.

Sl. No.	Description of Violation	Severity	Penalty (INR)
1.	Unhygienic/Bad condition of PPE	2	500
2.	Unsafe Act/Condition of Severity 4	4	4000
3.	Unsafe Act/Condition of Severity 5	5	5000
4.	No Earthling of Electrical equipment	5	5000
5.	Working without efficient supervision	4	4000
6.	Non-reporting of incidents	3	3000
7.	Starting the job without Toolbox Talk	4	4000
8.	Electric cable tied with metal wire / Use of damaged electrical cable / Use of two core cable	3	3000
9.	Rubber mat not available in front of electrical panels.	3	3000
10.	Inserting naked wire into the socket instead of a plug	5	5000
11	Inflammable materials stored inside PSS/FCC/Distribution Room	5	5000
12	Water accumulation found near electrical panels / equipment	5	5000
13	Grinding wheel/ Coupling/ Piling winch/other rotating parts without guard	4	4000
14	Inadequate illumination of working area	3	3000
15	Bringing inside PSS/FCC or any other work area any chemicals without approval.	5	5000
16	Loose materials in work area which can fall down or fly during a storm	5	5000
17	Misusing emergency facilities like fire hydrant line/ hose box/ spray system/ eye wash etc.	3	3000
18	Entering restricted areas like switch yard, hazardous material storage room etc. without authorization	3	3000
19	Not using 24 V lamp inside confined spaces	3	3000
20	Bypassing/overriding safety interlocks	5	5000
21	Working besides road without proper barricading and monitoring of traffic	5	5000

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22	Smoking in prohibited area (Closed Go-downs, Storage of flammable material, Storage of Gas cylinders, PSS , Offices etc.)	3	3000
23	Improper stacking of materials in Storage Yard	4	4000
24	Sleeping at workplace	3	3000
25	First aid box not available / in locked condition	2	2000
26	Appointment of subcontractor without his Safety Bid Evaluation and/or without the permission of engineer in charge or Order manager.	5	5% of order value
27	Bad Housekeeping with respect to ***TPSMS/GSP/GHK/022*** • 1st Instant • 2nd instant • 3rd instant • 4th instant • Subsequent instants	2	• 1000 • 2000 • 5000 • 10000 • 10000
28	Violations related to vehicles with respect to ***TPSMS/CSP/RSP/015.*** • Parking without wheel choke • Parking in undesignated area • Heavy vehicle without helper or co-driver • Seat belt not available / not used • Driver without license • Heavy vehicles without reverse horn • Using mobile phone while driving • Lights/mirrors not working /broken	3	1000 per each violation
28	Violation in Gas cutting and Gas cylinder handling • Cylinder valve without guard • No flashback arrester • Leaky DA/Oxygen hose • Cylinders not kept in secured manner • Cylinder trolley not available • Cylinders are transported by manual rolling	5	2000 per each violation
29	Violations in Lifting Operations w.r.t. to *TPSMS/CSP/HEMS/005* • Hook latch missing • Load raised or swung over people or occupied areas of building • Persons standing within the swing area of the crane • No barricading of crane working area • Use of damaged lifting tools and tackles	5	2000 per each violation

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	• Lifting tools and tackles not tested / Test certificate expired • Crane operator without proper license • Angular loading • Lifting / shifting heavy material without guide rope • Using mobile phone during loading and unloading jobs		
30	Violation in Scaffolding work w.r.t. to TPSMS/CSP/SCAF/007 • Unstable scaffolding/nonstandard Scaffolding in use • Handrails/mid rails/toe guards missing • Safety harness not anchored on fixed structure • Opening found in working platform	5	2000 per violation
31	Violation in Excavation Work w.r.t. to TPSMS/CSP/EXS/002 • Loose material falling into excavated pit • Water logging in excavated pits / trenches • Inadequate or no barricading • Undercut / cave in found on sides of excavated pits	4	2000 per violation
32	Caution boards, danger signs (luminescent /red) along with emergency contact number are not found displayed.	3	3000
34	Spillage of hazardous material/chemicals during transportation	4	4000

Penalty for Incidents / Accidents-(R7)

Consequence of incident / Accident		Incident / Accident				
Sr.No.	**Type of Injury**	**1st**	**2nd**	**3rd**	**4th**	**Action Required**
1	Major Injury (Bone injury or burn or hospitalization >48 hrs.) Non-fatal	**F**	**F**	**G**	G	
2	Major Injury (Bone injury or burn or hospitalization >48 hrs.) Non-Fatal (Two or more non-Fatal in one event)	**G**	**G**	**H**		**Intolerable**
3	Single fatality	**G**	**H**			
4	Multiple fatalities (Two or more fatalities in one event). Anywhere in Tata power.	**H**				

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Legend	Action to be taken	Responsibility	Penalty (INR)	
F	Memo to BA and Levy of Penalty	Order Manager/Engineer in charge	200000	The no. of violations shall be calculated cumulative during the contract period for all contracts in SBU, not on a monthly basis
G	Memo to BA and Levy of Penalty	Order Manager/Engineer in charge	500000	
H	Memo to BA, Levy of Penalty, Termination of Contract and Blacklisting the BA	Order Manager/Engineer in charge	1000000	

Appendix -13: CHECKLIST TO BE USED DURING SITE VISIT

Checklist to be used: During site visit to check the adequacy Safety systems.			
		Observation	Score* (1-5)
1	Check the adequacy of safety policy and Safety Management system of the contractor.		
2	Does the contractor have written down safety procedures?		
3	Check the records of Near miss, unsafe act, unsafe conditions, and incidents.		
4	Check the organization setup to implement the safety systems at site (safety officer, safety supervisor)		
5	Check whether safety meeting and toolbox talk carried out regularly and records maintained or not.		
6	Is the process of incident investigation adequate or not?		
7	Verify incident reporting and recording system		
8	Check the usage of equipment/tools and tackles.		
9	Check for housekeeping at site		
10	Check the use of PPEs and general behavior of workforce towards safety		
	Total Score		
	Site Visit Score		

Score*- rating on the scale of 1-5 to be given based on the observations on site. Score of 1 is the lowest and core of 5 is the highest.

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Appendix 14: Indicative List of High-Risk Jobs

Indicative high-risk jobs are given below. This is not an exhaustive list. This is only indicative.

Sl. No.	Jobs
1	Transmission Line Tower Erection on columns, near live lines, In congested areas, In creeks, In the Sea.
2	Conductor Stringing on Tower Using Tensioner & Puller in the area such as Line Crossing, Near Live lines, Congested Areas, Road Crossing, Bridge Crossing, Railway line Crossing, In creeks, In the Sea
3	Cable Pulling by Using winch Machine in City and Rural Areas
4	Hot Washing of HT and Extra HT lines, Towers and switchyards equipment
5	Maintenance / Testing and Replacement of High Voltage (33 KV etc.) Switchyard equipment
6	Installation of Lifts
7	Installation of EOT Cranes
8	Tower Dismantling
9	Working on H Frame /Pole mounted Transformers
10	Excavation in operational Area having power cables in receiving station
11	Identification and spiking of cable / disconnection of cables from poles
12	Working on Electrical Panels
13	Working on live electrical switch yard, Material handling and equipment repair/installation.
`14	All activities that require climbing on a pole/structures/Towers/Transformers
15	Cable laying and termination jobs
16	Excavation beyond 5 feet near existing building and structures
17	Working in confined Spaces
18	Stringing of new conductors over poles

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CORPORATE ENVIRONMENT POLICY

Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:

- Complying with the requirements and spirit of applicable environmental laws and striving to exceed required levels of compliance wherever feasible
- Ensuring that our employees are trained to acquire the necessary skills to meet environmental standards
- Conserving natural resources by improving efficiency and reducing wastage
- Making business decisions that aim towards sustainable development
- Engaging with stakeholders to create awareness on sustainability

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER
Lighting up Lives!

CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
  - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
  - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
  - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
  - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
  - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

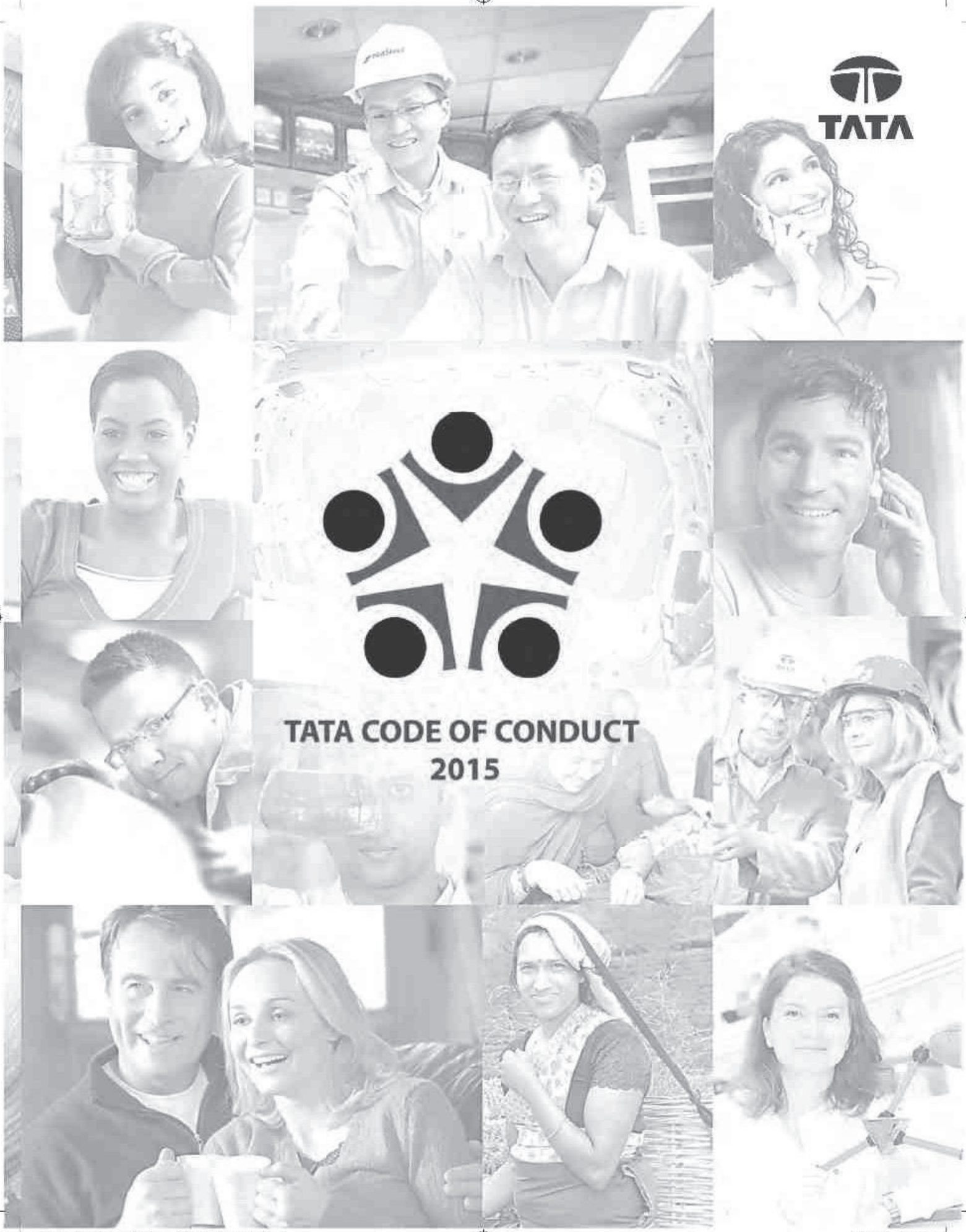
The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER

Lighting up Lives!



TATA

TATA CODE OF CONDUCT 2015

LEADERSHIP THAT INSPIRES

For over 100 years, the Tata group has been led by visionaries who have stayed true to the vision of the founder, Jamsetji Tata.
A vision that placed the greater good of society at par with business growth.
A vision that put into practice pioneering social initiatives that changed the way responsible business was run.
And a vision that brought into the group a strong social conscience.

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We do not claim to be more unselfish, more generous or more philanthropic than other people. But we think we started on sound and straightforward business principles, considering the interests of the shareholders our own, and the health and welfare of the employees, the sure foundation of our success.

Jamsetji Tata
Founder of the Tata group
Chairman (1868 – 1904)

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FOREWORD

Tata companies have consistently adhered to the values and ideals articulated by the Founder for over 150 years. The Tata Code of Conduct was first formalized by Mr Ratan Tata. It articulates the Group's values and ideals that guide and govern the conduct of our companies as well as our colleagues in all matters relating to business. Today, the Code is a bedrock on which we base our individual, as well as leadership commitments to core Tata values.

The Tata Code of Conduct outlines our commitment to each of our stakeholders, including the communities in which we operate, and is our guiding light when we are sometimes faced with business dilemmas that leave us at ethical crossroads. The Code is also dynamic in that it has been periodically refreshed in order to remain contemporary and contextual to the changes in law and regulations. However it remains unaltered at its core.

Our stellar reputation and success as a business entity has been defined by the powerful commitment and adherence to the core values and principles expressed in this Code, by all our employees, directors and partners. I trust every Tata colleague and Tata company will continue to not only comply with the laws and regulations that govern our business interests around the world, but will continue to set new standards of ethical conduct that will generate deep respect and inspire emulation by others.

N. Chandrasekaran
21st February, 2017



A. OUR VALUES

TATA has always been values-driven. The five core values that underpin the way we conduct our business activities are:



INTEGRITY

We will be fair, honest, transparent and ethical in our conduct; everything we do must stand the test of public scrutiny.

UNITY

We will invest in our people and partners, enable continuous learning, and build caring and collaborative relationships based on trust and mutual respect.

RESPONSIBILITY

We will integrate environmental and social principles in our businesses, ensuring that what comes from the people goes back to the people many times over.

PIONEERING

We will be bold and agile, courageously taking on challenges, using deep customer insight to develop innovative solutions.

EXCELLENCE

We will be passionate about achieving the highest standards of quality, always promoting meritocracy.

These universal values serve as the foundation for the Tata Code of Conduct. They find expression within the value system of every Tata company.

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B. SCOPE AND PURPOSE OF THIS CODE

1. This Code sets out how we behave with:
   - our employees, or those who work with us;
   - our customers;
   - the communities and the environment in which we operate;
   - our value-chain partners, including suppliers and service providers, distributors, sales representatives, contractors, channel partners, consultants, intermediaries and agents;
   - our joint-venture partners or other business associates;
   - our financial stakeholders;
   - the governments of the countries in which we operate; and
   - our group companies.
2. In this Code, "we or us" means our company, our executive directors, officers, employees and those who work with us, as the context may require.
3. The term "our group companies" in this Code typically means companies Tata Sons intends for this Code to apply to, and / or to whom Tata Sons has issued this Code.
4. This Code sets out our expectations of all those who work with us. We also expect those who deal with us to be aware that this Code underpins everything we do, and in order to work with us they need to act in a manner consistent with it.

REMEMBER...

It is our commitment to protect our reputation and our brand equity by adhering to the values and principles set out in this Code. By doing so, we strengthen our unique culture and identity.

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OUR CORE PRINCIPLES



> The Tata philosophy of management has always been, and is today more than ever, that corporate enterprises must be managed not merely in the interests of their owners, but equally in those of their employees, of the consumers of their products, of the local community and finally of the country as a whole.

J.R.D. Tata
Chairman, Tata Sons (1938 – 1991)

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C. OUR CORE PRINCIPLES

1. We are committed to operating our businesses conforming to the highest moral and ethical standards. We do not tolerate bribery or corruption in any form. This commitment underpins everything that we do.
2. We are committed to good corporate citizenship. We treat social development activities which benefit the communities in which we operate as an integral part of our business plan.
3. We seek to contribute to the economic development of the communities of the countries and regions we operate in, while respecting their culture, norms and heritage. We seek to avoid any project or activity that is detrimental to the wider interests of the communities in which we operate.
4. We shall not compromise safety in the pursuit of commercial advantage. We shall strive to provide a safe, healthy and clean working environment for our employees and all those who work with us.
5. When representing our company, we shall act with professionalism, honesty and integrity, and conform to the highest moral and ethical standards. In the countries we operate in, we shall exhibit culturally appropriate behaviour. Our conduct shall be fair and transparent and be perceived as fair and transparent by third parties.
6. We shall respect the human rights and dignity of all our stakeholders.
7. We shall strive to balance the interests of our stakeholders, treating each of them fairly and avoiding unfair discrimination of any kind.
8. The statements that we make to our stakeholders shall be truthful and made in good faith.
9. We shall not engage in any restrictive or unfair trade practices.
10. We shall provide avenues for our stakeholders to raise concerns or queries in good faith, or report instances of actual or perceived violations of our Code.
11. We shall strive to create an environment free from fear of retribution to deal with concerns that are raised or cases reported in good faith. No one shall be punished or made to suffer for raising concerns or making disclosures in good faith or in the public interest.
12. We expect the leaders of our businesses to demonstrate their commitment to the ethical standards set out in this Code through their own behaviour and by establishing appropriate processes within their companies.
13. We shall comply with the laws of the countries in which we operate and any other laws which apply to us. With regard to those provisions of the Code that are explicitly dealt with under an applicable law or employment terms, the law and those terms shall take precedence. In the event that the standards prescribed under any applicable law are lower than that of the Code, we shall conduct ourselves as per the provisions of the Code.

REMEMBER...

"Good faith" means having a reasonable belief that the information you have provided is truthful. It does not mean having 'all the evidence' about the potential violation or case reported.

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OUR EMPLOYEES



Once you got the best people, the people who shared our values and ideals, we left them free to act on their own. We do not fetter them. We encourage them and give them opportunities for leadership.

J.R.D. Tata
Chairman, Tata Sons (1938 – 1991)

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D. OUR EMPLOYEES

Equal opportunity employer

1. We provide equal opportunities to all our employees and to all eligible applicants for employment in our company. We do not unfairly discriminate on any ground, including race, caste, religion, colour, ancestry, marital status, gender, sexual orientation, age, nationality, ethnic origin, disability or any other category protected by applicable law.
2. When recruiting, developing and promoting our employees, our decisions will be based solely on performance, merit, competence and potential.
3. We shall have fair, transparent and clear employee policies which promote diversity and equality, in accordance with applicable law and other provisions of this Code. These policies shall provide for clear terms of employment, training, development and performance management.

Q&A

A job requirement entails extensive travel. One of the candidates has excellent relevant experience and qualifications. However, this candidate is a single parent. As a result, I feel such a situation would significantly hinder this candidate's ability to cope with the job requirement. What should I do?

In accordance with the Code, the decision to recruit an employee should be based upon merit. We cannot make a presumption that the candidate would not be able to meet the travel requirements of the job. All eligible candidates should be provided with equal opportunity to demonstrate or justify that they can cope with the travel requirements of the job. Being a single parent cannot be a ground to be discriminated against at any stage of recruitment or ongoing employment in our company.

REMEMBER...

We do not tolerate harassment in any form and therefore we expect every employee to discourage such misdemeanours in the workplace.

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Dignity and respect

4. Our leaders shall be responsible for creating a conducive work environment built on tolerance, understanding, mutual cooperation and respect for individual privacy.
5. Everyone in our work environment must be treated with dignity and respect. We do not tolerate any form of harassment, whether sexual, physical, verbal or psychological.
6. We have clear and fair disciplinary procedures, which necessarily include an employee's right to be heard.
7. We respect our employees' right to privacy. We have no concern with their conduct outside our work environment, unless such conduct impairs their work performance, creates conflicts of interest or adversely affects our reputation or business interests.

Human rights

8. We do not employ children at our workplaces.
9. We do not use forced labour in any form. We do not confiscate personal documents of our employees, or force them to make any payment to us or to anyone else in order to secure employment with us, or to work with us.

Bribery and corruption

10. Our employees and those representing us, including agents and intermediaries, shall not, directly or indirectly, offer or receive any illegal or improper payments or comparable benefits that are intended or perceived to obtain undue favours for the conduct of our business.

REMEMBER...

Violation by even a single employee of any law relating to anti-bribery, anti-corruption, anti-competition, data privacy, etc. could result in severe financial penalties and cause irreparable reputational damage to the company.

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Gifts and hospitality

11. Business gifts and hospitality are sometimes used in the normal course of business activity. However, if offers of gifts or hospitality (including entertainment or travel) are frequent or of substantial value, they may create the perception of, or an actual conflict of interest or an 'illicit payment'. Therefore, gifts and hospitality given or received should be modest in value and appropriate, and in compliance with our company's gifts and hospitality policy.

Freedom of association

12. We recognise that employees may be interested in joining associations or involving themselves in civic or public affairs in their personal capacities, provided such activities do not create an actual or potential conflict with the interests of our company. Our employees must notify and seek prior approval for any such activity as per the 'Conflicts of Interest' clause of this Code and in accordance with applicable company policies and law.

REMEMBER...

As a general rule, we may accept gifts or hospitality from a business associate, only if such a gift:

- has modest value and does not create a perception (or an implied obligation) that the giver is entitled to preferential treatment of any kind;
- would not influence, or appear to influence, our ability to act in the best interest of our company;
- would not embarrass our company or the giver if disclosed publicly.

The following gifts are never appropriate and should never be given or accepted:

- gifts of cash or gold or other precious metals, gems or stones;
- gifts that are prohibited under applicable law;
- gifts in the nature of a bribe, payoff, kickback or facilitation payment*;
- gifts that are prohibited by the gift giver's or recipient's organisation; and
- gifts in the form of services or other non-cash benefits (e.g. a promise of employment).

(*'Facilitation' payment is a payment made to secure or speed up routine legal government actions, such as issuing permits or releasing goods held in customs.)

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Working outside employment with us

13. Taking employment, accepting a position of responsibility or running a business outside employment with our company, in your own time, with or without remuneration, could interfere with your ability to work effectively at our company or create conflicts of interest. Any such activity must not be with any customer, supplier, distributor or competitor of our company. Our employees must notify and seek prior approval for any such activity as per the 'Conflicts of Interest' clause of this Code and in accordance with applicable company policies and law.

Integrity of information and assets

14. Our employees shall not make any wilful omissions or material misrepresentation that would compromise the integrity of our records, internal or external communications and reports, including the financial statements.

15. Our employees and directors shall seek proper authorisation prior to disclosing company or business-related information, and such disclosures shall be made in accordance with our company's media and communication policy. This includes disclosures through any forum or media, including through social media.

16. Our employees shall ensure the integrity of personal data or information provided by them to our company. We shall safeguard the privacy of all such data or information given to us in accordance with applicable company policies or law.

17. Our employees shall respect and protect all confidential information and intellectual property of our company.

18. Our employees shall safeguard the confidentiality of all third party intellectual property and data. Our employees shall not misuse such intellectual property and data that comes into their possession and shall not share it with anyone, except in accordance with applicable company policies or law.

19. Our employees shall promptly report the loss, theft or destruction of any confidential information or intellectual property and data of our company or that of any third party.

Q&A

I am an accountant in the finance department of my company. Due to my artistic skills, I received an offer to pen cartoons for a children's publication for which I would receive compensation. I plan to undertake this activity during week-ends. What should I do before accepting this offer?

Before accepting the offer, you should ascertain whether the company policies and rules require you to make a disclosure to your supervisor so that the company may determine whether your undertaking this activity adversely affects our company's interests. On confirmation from the company that it does not do so, you would be free to take up the activity. It is also your duty to bring to the attention of the company whenever there is any change in the situation you have disclosed.

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20. Our employees shall use all company assets, tangible and intangible, including computer and communication equipment, for the purpose for which they are provided and in order to conduct our business. Such assets shall not be misused. We shall establish processes to minimise the risk of fraud, and misappropriation or misuse of our assets.

21. We shall comply with all applicable anti-money laundering, anti-fraud and anti-corruption laws and we shall establish processes to check for and prevent any breaches of such laws.

Insider trading

22. Our employees must not indulge in any form of insider trading nor assist others, including immediate family, friends or business associates, to derive any benefit from access to and possession of price sensitive information that is not in the public domain. Such information would include information about our company, our group companies, our clients and our suppliers.

Q&A

Our company has recently announced the launch of a new business initiative. In connection with this, your friend who is a journalist with a leading business newspaper has asked you to provide some information that he could cover in his forthcoming article. He has promised not to quote you, or reveal your identity. Should you be giving him this information?

No. You should not be sharing information of this nature with the media, even if it is assured that the source would remain anonymous. Only authorised personnel in the company are permitted to speak to the media and provide information of this nature.

Our company has a "Use of Social Media" policy that lays down the "dos and don'ts" for use of social media even if you may access such media on your own time. Why is there such a policy?

External communication is a serious matter. It must be carefully managed because information put out with reference to our company or its businesses needs to be clear, truthful and not violate any undertakings we have given to other parties. In each business there are managers nominated to authorise and make different types of statements to the outside world. These managers should be consulted about any request for information you may receive or information you think we should give out.
In using social media, in particular blogs or social networking sites, you should exercise great caution while talking about our company or the business we do. It may feel like you are chatting with friends or expressing a personal opinion but even while doing so you cannot share any confidential information of our company.

REMEMBER...

We must respect the property rights of others by never misusing their assets, intellectual property or trade secrets, including the copying or downloading of unauthorised software, trademarks, copyrighted material or logos. We should never make unauthorised copies of computer software programs or use unlicensed personal software on company computers.

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Prohibited drugs and substances

23. Use of prohibited drugs and substances creates genuine safety and other risks at our workplaces. We do not tolerate prohibited drugs and substances from being possessed, consumed or distributed at our workplaces, or in the course of company duties.

Conflicts of interest

24. Our employees and executive directors shall always act in the interest of our company and ensure that any business or personal association *including close personal relationships* which they may have, does not create a conflict of interest with their roles and duties in our company or the operations of our company. Further, our employees and executive directors shall not engage in any business, relationship or activity, which might conflict with the interest of our company or our group companies.

25. Should any actual or potential conflicts of interest arise, the concerned person must immediately report such conflicts and seek approvals as required by applicable law and company policy. The competent authority shall revert to the employee within a reasonable time as defined in our company's policy, so as to enable the concerned employee to take necessary action as advised to resolve or avoid the conflict in an expeditious manner.

26. In the case of all employees other than executive directors, the Chief Executive Officer / Managing Director shall be the competent authority, who in turn shall report such cases to the Board of Directors on a quarterly basis. In case of the Chief Executive Officer / Managing Director and executive directors, the Board of Directors of our company shall be the competent authority.

Q&A

You are responsible for maintaining our company's customer database. One of your friends is starting a business venture and requests you to share a few particulars from this database for marketing purposes of his business. He assures you that he would keep the data as well as his source confidential. Should you do so?

No. You should respect the confidentiality of customer information and not share any part of the database with any person without due authorisation.

You have access to revenue numbers of different business units of our company. While having a conversation with you over evening drinks, your friend enquires about the financial performance of our company. You do not share detailed information with your friend, but share approximate revenue figures. Is this conduct of yours correct?

No, it is not. You are not permitted to share financial information of our company with others who do not need to know this information. Financial information should always be safeguarded and disclosed only on a need-to-know basis after obtaining requisite approvals. Sharing of any price sensitive information that is not generally available with the public could also lead to violation of applicable insider trading laws.

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27. Notwithstanding such or any other instance of conflict of interest that exists due to historical reasons, adequate and full disclosure by interested employees shall be made to our company's management. At the time of appointment in our company, our employees and executive directors shall make full disclosure to the competent authority, of any interest leading to an actual or potential conflict that such persons or their immediate family (including parents, siblings, spouse, partner, children) or persons with whom they enjoy close personal relationships, may have in a family business or a company or firm that is a competitor, supplier, customer or distributor of, or has other business dealings with, our company.

REMEMBER...

A conflict of interest could be any known activity, transaction, relationship or service engaged in by an employee, his/her immediate family (including parents, siblings, spouse, partner, and children), relatives or a close personal relationship, which may cause concern (based upon an objective determination) that the employee could not or might not be able to fairly perform his/her duties to our company.

Examples of Potential Conflicts of Interest

A conflict of interest, actual or potential, arises where, directly or indirectly, an employee or executive director:

(a) engages in a business, activity or relationship with anyone who is party to a transaction with our company;

(b) is in a position to derive an improper benefit, personally or for any family member or for any person in a close personal relationship, by making or influencing decisions relating to any transaction;

(c) conducts business on behalf of our company or is in a position to influence a decision with regard to our company's business with a supplier or customer where a relative of, or a person in close personal relationship with, an employee or executive director is a principal officer or representative, resulting in a personal benefit or a benefit to the relative;

(d) is in a position to influence decisions with regard to award of benefits such as increase in salary or other remuneration, posting, promotion or recruitment of a relative or a person in close personal relationship employed in our company or any of our group companies;

(e) undertakes an activity by which the interest of our company or our group companies can be compromised or defeated; or

(f) does anything by which an independent judgement of our company's or our group companies' best interest cannot be exercised.

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28. If there is a failure to make the required disclosure and our management becomes aware of an instance of conflict of interest that ought to have been disclosed by an employee or executive director, our management shall take a serious view of the matter and consider suitable disciplinary action as per the terms of employment. In all such matters, we shall follow clear and fair disciplinary procedures, respecting the employee's right to be heard.

Examples of activities normally approved (post-disclosure) as per applicable company policy

Acceptance of a position of responsibility (whether for remuneration or otherwise) in the following cases would typically be permitted, provided the time commitments these demand do not disturb or distract from the employee's primary duties and responsibilities in our company, and are promptly disclosed to the relevant competent authority:

(a) Directorships on the Boards of any of our group companies, joint ventures or associate companies.

(b) Memberships/positions of responsibility in educational/professional bodies, where such association will promote the interests of our company.

(c) Memberships or participation in government committees/bodies or organisations.

Q&A

You are in a relationship with a colleague who has been recently moved into your team and would now be reporting to you. What should you do?

Romantic or close personal relationships with another employee where a reporting relationship exists and one is responsible for evaluating the other's performance, is likely to create a conflict of interest. In such a situation, you would need to report the potential conflict to your supervisor.

Your company is submitting a proposal to a company in which you were previously employed. You have confidential information pertaining to your previous employer, which you believe will help your present employer in winning the contract. Should you share this information?

No. You should not share this information with your company since it relates to confidential information of a third party. Your company respects its employees' duty to protect confidential information that they may have relating to their previous employers.

You are the purchasing manager in the procurement department of your company. You receive an invitation from a supplier to attend a premier sporting event as her guest. This particular supplier is one of the vendors who has submitted a proposal for an open tender issued by your company. Should you accept the invitation?

No. You should not accept the invitation in this instance. Since you are in a key decision-making role for the tender, any unusual benefit that you receive could be perceived as an inducement that could compromise your objectivity.

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OUR CUSTOMERS



We have continued to enjoy prosperity, even with adverse times to fight against. Our relations with all concerned are the most friendly. We have maintained the same character for straight-forward dealing with our constituents and customers. Our productions have continued to be of the same high quality, and therefore command the best reputation and realise the highest prices. … I mention these facts only to point out that with honest and straight-forward business principles, close and careful attention to details, and the ability to take advantage of favourable opportunities and circumstances, there is a scope for success.

Jamsetji Tata
Founder of the Tata group
Chairman, Tata Sons (1868 – 1904)

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E. OUR CUSTOMERS

Products and services

1. We are committed to supplying products and services of world-class quality that meet all applicable standards.
2. The products and services we offer shall comply with applicable laws, including product packaging, labelling and after-sales service obligations.
3. We shall market our products and services on their own merits and not make unfair or misleading statements about the products and services of our competitors.

Export controls and trade sanctions

4. We shall comply with all relevant export controls or trade sanctions in the course of our business.

Fair competition

5. We support the development and operation of competitive open markets and the liberalisation of trade and investment in each country and market in which we operate.
6. We shall not enter into any activity constituting anti-competitive behaviour such as abuse of market dominance, collusion, participation in cartels or inappropriate exchange of information with competitors.
7. We collect competitive information only in the normal course of business and obtain the same through legally permitted sources and means.

Dealings with customers

8. Our dealings with our customers shall be professional, fair and transparent.
9. We respect our customers' right to privacy in relation to their personal data. We shall safeguard our customers' personal data, in accordance with applicable law.

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Q&A

You are the Regional Sales Manager of our company. You have become a member of an "informal group", on an instant messaging service, whose members are the regional sales heads of our company's competitors. The administrator of the group has requested an in-person meeting to informally discuss market conditions and brainstorm on "pricing strategy" from an industry perspective. What should you do?

Any meeting with competitors, especially to discuss "pricing strategy", could be an attempt to promote an anti-competitive practice or manipulate prices. You should respond by declining this invitation and exiting the "informal group". You should also report this incident to your supervisor and your Legal department.

You are attending a customer meeting with a colleague, and your colleague makes an untruthful statement about the company's services. What should you do?

You should assist your colleague in correcting the inaccuracy during the meeting if possible. If this is not possible, raise the issue with your colleague after the meeting to enable him/her or the company to correct any misrepresentation made to the customer.

While working on a customer project, you receive a call from your colleague. He used to manage that customer account before you took over his role. He recalls that he had worked with the customer on developing a new ordering system which he thinks would be beneficial for another customer and requests you to send him the project details. What should you do?

You must not share this information without specific approval of the customer; you are not permitted to use a customer's assets, including software, for another customer or for any personal use.

REMEMBER...

Striving for excellence in the standards of our work and in the quality of our goods and services is a core Tata value. It is the unwavering practice of this value that builds and sustains customer trust in our brand.

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OUR COMMUNITIES AND THE ENVIRONMENT



> In a free enterprise, the community is not just another shareholder in business but is in fact the very purpose of its existence.

Jamsetji Tata
Founder of the Tata group
Chairman, Tata Sons (1868 – 1904)

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F. OUR COMMUNITIES AND THE ENVIRONMENT

Communities

1. We are committed to good corporate citizenship, and shall actively assist in the improvement of the quality of life of the people in the communities in which we operate.
2. We engage with the community and other stakeholders to minimise any adverse impact that our business operations may have on the local community and the environment.
3. We encourage our workforce to volunteer on projects that benefit the communities in which we operate, provided the principles of this Code, where applicable, and in particular the 'Conflicts of Interest' clause are followed.

The environment

4. In the production and sale of our products and services, we strive for environmental sustainability and comply with all applicable laws and regulations.
5. We seek to prevent the wasteful use of natural resources and are committed to improving the environment, particularly with regard to the emission of greenhouse gases, consumption of water and energy, and the management of waste and hazardous materials. We shall endeavour to offset the effect of climate change in our activities.

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OUR VALUE-CHAIN PARTNERS



If we had done some of the things that some other groups have done, we would have been twice as big as we are today. But we didn't, and I would not have it any other way.

J.R.D. Tata

Chairman, Tata Sons (1938 – 1991)

(on the pace of expansion of the Tata group in the 1960s and 70s)

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G. OUR VALUE-CHAIN PARTNERS

1. We shall select our suppliers and service providers fairly and transparently.
2. We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
3. Our suppliers and service providers shall represent our company only with duly authorised written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
4. We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
5. We respect our obligations on the use of third party intellectual property and data.

Q&A

You head the procurement function in our company. You have tight budgetary constraints for a project that you are working on. In order to complete the project within the targeted costs, you intend to request your supplier to provide you an exceptional discount on this project order on the understanding that you would "make it up to him" in future orders. Would you be violating the Code?

Yes, you would. Inducement in any form, including future benefits to the supplier, could compromise your ability to act objectively and in the best interests of the company and therefore must be avoided.

REMEMBER...

Our value-chain partners would include our suppliers and service providers, distributors, sales representatives, contractors, channel partners, consultants, intermediaries and agents; joint-venture partners and other business associates.

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OUR FINANCIAL STAKEHOLDERS



Ethical behaviour in business – in every sphere and with all constituents – has been the bedrock on which the Tata group has built, and operates, its enterprises. This has been an article of faith for the group ever since its inception, a fundamental element of our cherished heritage and the essence of our way of life.

Ratan Tata
Chairman, Tata Sons (1991 – 2012)

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H. OUR FINANCIAL STAKEHOLDERS

1. We are committed to enhancing shareholder value and complying with laws and regulations that govern shareholder rights.
2. We shall inform our financial stakeholders about relevant aspects of our business in a fair, accurate and timely manner and shall disclose such information in accordance with applicable law and agreements.
3. We shall keep accurate records of our activities and shall adhere to disclosure standards in accordance with applicable law and industry standards.

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GOVERNMENTS



Business, as I have seen it, places one great demand on you; it needs you to impose a framework of ethics, values, fairness and objectivity on yourself at all times. It is not easy to do this; you cannot impose it on yourself forcibly because it has to become an integral part of you.

Ratan Tata
Chairman, Tata Sons (1991 – 2012)

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I. GOVERNMENTS

Political non-alignment

1. We shall act in accordance with the constitution and governance systems of the countries in which we operate. We do not seek to influence the outcome of public elections, nor to undermine or alter any system of government. We do not support any specific political party or candidate for political office. Our conduct must preclude any activity that could be interpreted as mutual dependence/favour with any political body or person, and we do not offer or give any company funds or property or other resources as donations to any specific political party, candidate or campaign.

   Any financial contributions considered by our Board of Directors in order to strengthen democratic forces through a clean electoral process shall be extended only through the Progressive Electoral Trust in India, or by a similar transparent, duly-authorised, non-discriminatory and non-discretionary vehicle outside India.

Government engagement

2. We engage with the government and regulators in a constructive manner in order to promote good governance. We conduct our interactions with them in a manner consistent with our Code.

3. We do not impede, obstruct or improperly influence the conclusions of, or affect the integrity or availability of data or documents for any government review or investigation.

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OUR GROUP COMPANIES



I do not think anyone was on par with Jamsetji as an industrial visionary. But that is not the sole reason why I have been an admirer of Jamsetji. The major reason was his sense of values, sterling values, which he imparted to this group. If someone were to ask me, what holds the Tata companies together, more than anything else, I would say it is our shared ideals and values which we have inherited from Jamsetji Tata.

J.R.D. Tata
Chairman, Tata Sons (1938 – 1991)

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J. OUR GROUP COMPANIES

1. We seek to cooperate with our group companies, including joint ventures, by sharing knowledge, physical resources, human and management resources and adopting leading governance policies and practices in accordance with applicable law including adherence to competition law, where relevant.
2. We shall strive to achieve amicable resolution of any dispute between us and any of our group companies, through an appropriate dispute resolution mechanism so that it does not adversely affect our business interests and stakeholder value.
3. We shall have processes in place to ensure that no third party or joint venture uses the TATA name/brand to further its interests without proper authorisation.
4. Our Board of Directors shall consider for adoption policies and guidelines periodically formulated by Tata Sons and circulated to group companies.

Q&A

You are in the process of selecting potential vendors for an IT project in our company. In the final shortlist of two companies, one is a new start-up with limited references and a lower price-quotation, while the other is a Tata company with thirty years of implementation experience and good references, but a marginally higher quote for the same job. With all other parameters of choice being nearly equal, which company should you select for the job?

While price is undoubtedly an important criterion for decision making, it is clearly not the only one to be evaluated. You may also need to consider good customer references, proven track record and shared value systems in order to decide on your IT partner.

You are in the process of selecting potential vendors for a project. One of the three finalists is a group company. In reviewing the final proposals, you rank the group company second out of the three proposals based on pricing and total cost of ownership, and select the first-ranked vendor. Is this the right decision?

Yes. You should select the vendor that, on its own merits, is the vendor that is most appropriate for your company's requirements. You should not select a group company only because of its affiliation.

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RAISING CONCERNS

We encourage our employees, customers, suppliers and other stakeholders to raise concerns or make disclosures when they become aware of any actual or potential violation of our Code, policies or law. We also encourage reporting of any event (actual or potential) of misconduct that is not reflective of our values and principles.

Avenues available for raising concerns or queries or reporting cases could include:

- immediate line manager or the Human Resources department of our company
- designated ethics officials of our company
- the 'confidential reporting' third party ethics helpline (if available)
- any other reporting channel set out in our company's 'Whistleblower' policy.

We do not tolerate any form of retaliation against anyone reporting legitimate concerns. Anyone involved in targeting such a person will be subject to disciplinary action.

If you suspect that you or someone you know has been subjected to retaliation for raising a concern or for reporting a case, we encourage you to promptly contact your line manager, the company's Ethics Counsellor, the Human Resources department, the MD/CEO or the office of the group's Chief Ethics Officer.

Q&A

My supervisor has asked me to do something which I believe may be illegal. I am afraid if I do not do what I am told, I could lose my job. Should I do it?

No. Breaking the law is never an option. Discuss the situation with your supervisor to be certain that you both understand the facts. If your concerns are not resolved, contact a higher level supervisor, the Ethics Counsellor, the Legal department or report them via the company's confidential reporting system, if available.

I feel that my supervisor is treating me unfairly for reporting a concern to the Ethics Counsellor. What should I do?

Retaliation against anyone who raises a concern is a violation of the Code. You should therefore promptly report this action of your supervisor to the Ethics Counsellor or the MD/CEO of your company or via the company's confidential reporting system, if available.

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ACCOUNTABILITY

This Code is more than a set of prescriptive guidelines issued solely for the purpose of formal compliance. It represents our collective commitment to our value system and to our core principles.

Every person employed by us, directly or indirectly, should expect to be held accountable for his/her behaviour. Should such behaviour violate this Code, they may be subject to action according to their employment terms and relevant company policies.

When followed in letter and in spirit, this Code is *'lived'* by our employees as well as those who work with us. It represents our shared responsibility to all our stakeholders, and our mutual commitment to each other.

SPEAK UP...

If you are unsure whether a particular action you are about to take is consistent with the principles set forth in the Code, ask yourself:

- Could it directly or indirectly endanger someone or cause them injury?
- Is it illegal/unlawful or out of line with our policies and procedures?
- Does my conscience reject it? Does it conflict with my personal values?
- Would I feel uncomfortable if the story appeared in the media? Would it shame my company, spouse, partner, parent or child?
- Does it 'feel' wrong?

If the answer to any of these questions is "Yes", please stop and consult your reporting manager, the Ethics Counsellor, the Human Resource department, the Legal department or any member of the senior management team, to assist you in making the decision.

When faced with a dilemma: Stop, Think, Act Responsibly

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NOTE

The Code does not provide a comprehensive and complete explanation of all expectations from a company standpoint or obligations from a stakeholder standpoint.

Our employees have a continuing obligation to familiarise themselves with all applicable law, group-level advisories and policies, company-level policies, procedures and work rules as relevant. For any guidance on interpretation of the Code, we may seek support from our company's Ethics Counsellor or from the group's Chief Ethics Officer, as appropriate.

All joint ventures are encouraged to adopt the Tata Code of Conduct (TCOC) or a code of conduct that incorporates all elements of the TCOC.

This version of the Tata Code of Conduct supersedes all earlier versions and associated documents and stands effective from 29th July, 2015.

For any query or clarification on the Code, please contact the office of the group's Chief Ethics Officer via email at: ethicsoffice@tata.com.

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TATA CODE OF CONDUCT – 2015

I acknowledge that I have received the Tata Code of Conduct.

I have read the Tata Code of Conduct and I acknowledge that as a Tata employee, I am required to comply with the guidelines described therein and failure to do so may subject me to action as per my employment terms and relevant company policies.

If I have a concern about a violation, or a potential violation of the Tata Code of Conduct, I understand that there are channels available to me in my company to report such concerns. By making use of these channels when necessary, I will play my part in maintaining the high ethical standards to which we hold ourselves.

Signature: _____

Date: _____

Name: _____

Department: _____

Address: _____

_____

_____

(Please submit this declaration to your Ethics Counsellor or the Human Resource department of your company.)

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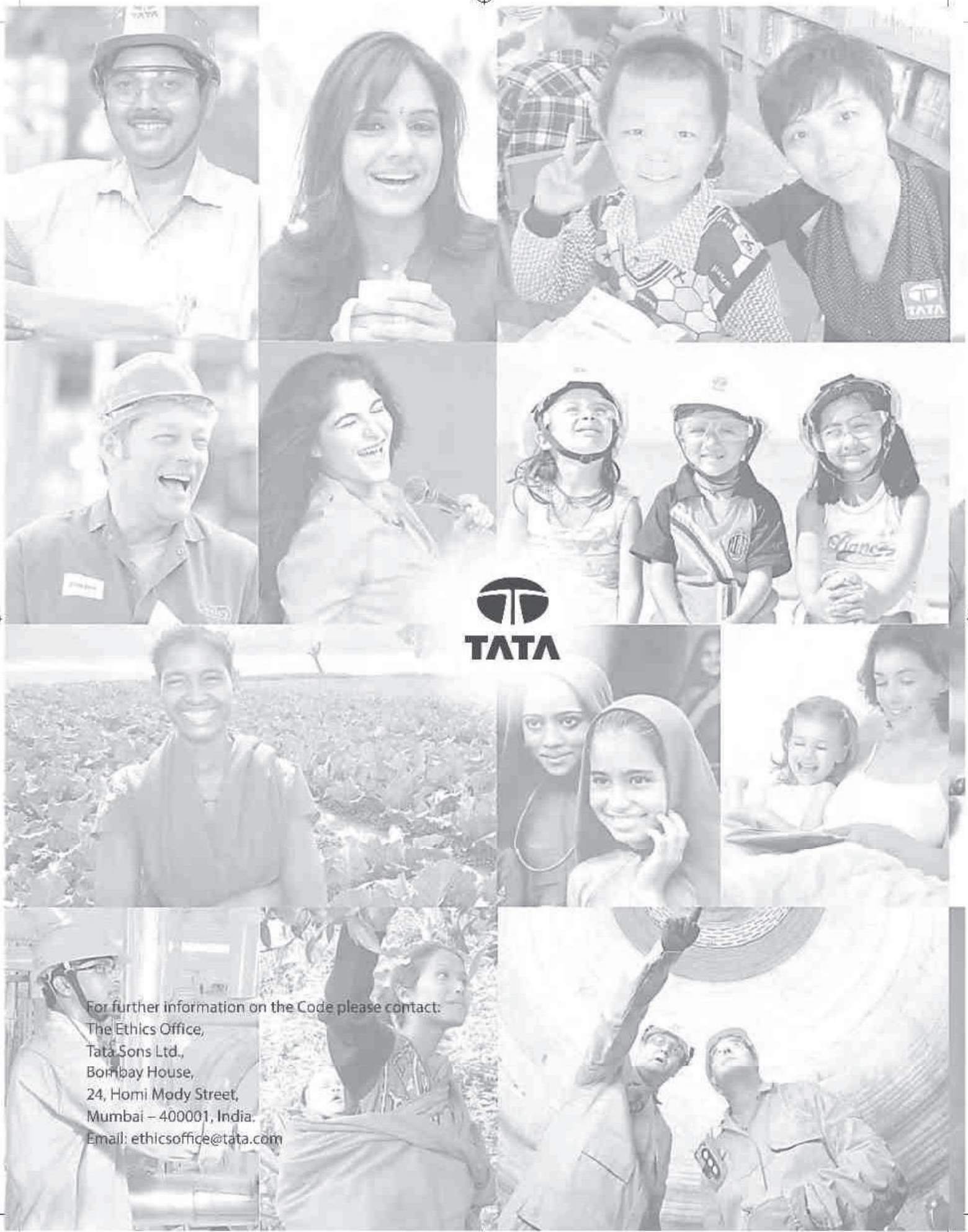
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TATA

For further information on the Code please contact:
The Ethics Office,
Tata Sons Ltd.,
Bombay House,
24, Homi Mody Street,
Mumbai – 400001, India.
Email: ethicsoffice@tata.com

CONFIDENTIAL

Section D.2: STC additional for Open Tender

Property of Tata Power – Not to be reproduced without prior written permission of Tata Power

Special Terms and Conditions

Item No D.2

1. The information contained in this Tender Document or subsequently provided to Bidder, whether verbally or in documentary or any other form by or on behalf of The Tata Power Company Limited herein referred to as Tata Power, or any of its employees, is provided to Bidder on the terms and conditions set out in this Tender Document and such other terms and conditions subject to which such information is provided.

2. Tata Power also does not accept any liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the statements contained in this Tender Document.

3. Tata Power, and its employees make no representation or warranty and shall have no liability to any person including any 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 Document or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the Tender Enquiry and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender Document or arising in any way in this Selection Process.

4. Tata Power may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this Tender Document.

5. Though adequate care taken while issuing this Tender Document, Bidder should satisfy himself for completeness of the document in all respects. Intimation of any discrepancy should be given to Tata Power Concerned Person immediately. If no intimation received by this office within 3 days from the date of issue of the Tender Document, then Tata Power shall consider that the document received by the Bidder is complete and to the satisfaction of the Bidder in all respects.

6. Tata Power reserves the right to change any or all of the provisions of this Tender Document before date of submission. Such changes, if any, would be intimated to Authorized Person of Interested Bidder through E-Tender System only.

7. The issue of this Tender Document does not imply that Tata Power is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Contract and Tata Power reserves the right to reject all or any of the Proposals without assigning any reasons and or making any correspondence on this account whatsoever.

8. Bidder shall bear all costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses

associated with any demonstrations or presentations which may be required by Tata Power or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder and Tata Power shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

Any Bidder wishing to undertake site visits for familiarization with site conditions, may do so. All costs towards site visits, conference and submission of documents shall be borne by the Bidder themselves.

9. No claim shall be entertained on account of disruption of internet services being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snag.

10. The decision of Tata Power Management regarding the opening of offers, evaluation and acceptance of the offer shall be final and binding on all the Bidders.

11. Tata Power reserves the right to extend the date of uploads/opening of tenders without assigning any reason thereof, and also reserves the right to distribute the work among more than one bidder.

12. Tata Power reserves the right to accept or reject any offer, and to annul the offer process and reject all offers at any time prior to award of Offer, without thereby incurring any liability to the affected Bidder or any obligation to inform the affected Bidder of the grounds for the Tata Power decision.

13. Tata Power reserves the right to invite open or limited tenders and when tenderers are called to accept a tender in whole or in part or reject any tender or all tenders without assigning any reasons for such action.

14. The authority for the acceptance of the tender will rest with the Tata Power. It shall be obligatory on the said authority to accept the most suitable bid or any other bid and no Bidder shall demand neither any explanation for the cause of rejection of his / their tender nor Tata Power undertake to assign reasons for declining to consider or reject any particular tender or tenders.

15. Local Conditions: It will be imperative on each Bidder to fully acquaint himself with all the local conditions and *factors* which would have any effect on the performance of the contract. Tata Power shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price, of time schedule of completion of work on account of any local conditions or factor shall be entertained after the offer is accepted by Tata Power.

16. The intending bidder will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that rates he enters in the tender papers are adequate and all inclusive, for the completion of works to the entire satisfaction of Tata Power.

17. Bidder who is Black listed / Banned / Debarred as on originally scheduled date of this bid opening or whose Agreement / Work order has been terminated on account of performance, or a bidder against whom there is adverse report about its performance under an existing contract or a bidders performance security has been forfeited by any company/organization for non-performance at any time shall not be eligible, within 5 (five) years of originally scheduled date of this bid opening by any State / Central Govt. / Govt. Undertaking / Public sector Undertaking in India for similar type of work, will not be eligible for participating in this tender. The Bidder should submit an affidavit on Letter Head (Format F1) as a proof in this regard.

18. The bidder should provide detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years. A consistent history of awards involving litigation against the Bidder may result in rejection of Bid.

19. Conditional and incomplete tenders shall not be accepted. Bid must be in conformity with schedules / formats of this tender.

20. At any stage if it is found that bidder

    a. have submitted false document for the purpose of qualifying in the tender or non-execution of project as per contract,
    b. Have not provided relevant details (for example litigation history etc)

    action as per Law will be taken and the pending payment, Bank Guarantee, EMD, Security amount of the bidder will be forfeited by Tata Power at any stage of execution. Also Bidder will be Blacklisted for future Tenders by Tata Power.

21. Issuance of Tender document does not construe that Bidder will be qualified for award of work.

22. Tata Power reserves the right to verify all statements, information and documents, Submitted by the Bidder in response to Tender Document. Any such verification or the lack of such verification by Tata Power to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of Tata Power there under.

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Section D.3: Special Conditions of contract

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Sr. No.	TOPIC	PRINCIPLES OF TERMS & CONDITIONS
1	GENERAL	The following **Special Conditions of Contract (SCC)** shall supplement the General Conditions of Contract - Civil Wherever there is a conflict, the provisions herein shall prevail over those in the "General Conditions of Contract".
2	CONTRACT PRICE AND CONTRACT STRUCTURE	Bids shall remain valid for 180 days from the due date of submission of the bid. Price submitted as part of e-Auction / Negotiation shall remain valid for 90 days from date of e-Auction / Negotiation. Notwithstanding clause above, Tata Power may solicit the bidder's consent to an extension of the period of bid validity. The request and responses thereto shall be made in writing. The contract value and annual item rates shall remain FIRM till completion of work & disbursal of payment.
3	COMMENCEMENT / EFFECTIVE DATE (Note: It is to be noted that commencement date, effective date and notice to proceed are one and the same.)	The vendor will commence work / manufacturing of equipment on issue of Letter of Award (LOA) / firm Purchase Order by TATA POWER and notice to proceed by the order manager.
4	CONTRACT PERFORMANCE BANK GUARANTEE	This is further to General Conditions of Contract Contractor shall submit a Contract performance bank Guarantee @5% of allocated annual OLA Value valid till completion of the Defect liability Period. CPBG shall be submitted within 15 days from the date of award of work as per approved format. Defect Liability Period (DLP) is 12 months from the date of completion of individual firm order.

5	TERMS OF PAYMENT	This is further to General Conditions of Contract, A. No Advance Payment shall be made. B. Detailed Payment Terms are as follows: - a. Monthly running bill shall be paid based on actual completion of work at site (as per joint measurement) duly certified by Engineer in charge. b. Retention: 05% of the gross value of each Running Account (RA) bill shall be retained as retention money which shall be released after satisfactory completion of work against individual firm order. c.100% of the invoice amount after retention and/or recoveries shall be released within 45 days for MSME vendors and 60 days for non MSME vendors from the date of submission of error free invoice supported by all required documents. d. Income tax and any other statutory recoveries as applicable shall be recovered from contractor monthly running bills and TDS certificate for the deductions shall be furnished. All payments are subject to signing of contract agreement and submission of an unconditional Contract Performance Bank Guarantee (CPBG). e. Safety Retention (If Applicable) shall be as per "Safety Terms & Conditions".
6	INSURANCE	This is further to General Conditions of Contract; complete insurance will be in bidder's scope.
7	LIQUIDATED DAMAGES FOR DELAYS, NON – PERFORMANCE & OVERALL CAP	This is further to General Conditions of Contract LD for delay in work completion shall be 1% of Firm order Value per week of delay subject to maximum of 10% of Firm Order Value, for respective firm orders.
8	WORK COMPLETION PERIOD	1) Contract will be valid for Three years. 2) Contract Release Order (CRO) shall be placed as and when required by the division and is not bound by the value of the contract. 3) The delivery period shall be indicated in the CRO placed by division.

9	WARRANTY PERIOD	This is further to General Conditions of Contract Contractor is responsible for defects in the works for a period of 12 (Twelve) months from the date of completion of work and issuance of the completion certificate by the owner/project manager to the contractor for the works. Defect Liability is 12 months from the date of completion of individual firm order.
10	TOTAL COMPLIANCE TO TCOC, SHE AND INTERNATIONAL SAFETY STANDARDS	Tata Power Contractor Safety Management (CSM) checklist is enclosed as Annex CSM format. Bidder shall have to abide fully without any deviation.
11	BID SUBMISSION (In Ariba)	Bidders are requested to submit their offer in line with this Tender document. Bids shall be submitted in 3 (Three) parts: **FIRST PART: "EMD"** of Rs. 60000 /- (Rupees Sixty Thousand Only) valid for 180 days from the due date of bid submission in the form of Bank Guarantee ONLY favoring 'The Tata Power Company Limited'. The EMD must be strictly in the format as mentioned in Tender Document, failing which it shall not be accepted by Tata Power and the bid as submitted shall be liable for rejection. **First Part must be submitted in Sealed Envelope.** **SECOND PART: "TECHNICAL / UN-PRICED COMMERCIAL BID"** shall contain the following documents: a) Documentary evidence in support of Technical, Commercial and Safety qualifying criteria b) Technical literature / GTP / Type test reports / Details of Qualified Manpower Available / Testing Facility available etc. *(complete in all respect as desired and detailed in Technical Specification and Technical Requirement Section)* c) Duly filled up Acceptance to Commercial Terms and Condition Form.

		d) Duly filled formats like Authorization affidavit form, Letter of Undertakings etc. in section F of covering tender document. e) Unpriced Commercial Bid. The technical / un-priced commercial bid shall be properly indexed and is to be submitted in Soft Copy though E-Tender system of Tata Power. Hard Copy of Technical Bids need not be submitted. **Second Part must be submitted through E-Tender system only.** **<u>THIRD PART</u>**: **"PRICE BID"** shall contain only the price details and strictly in Price Bid Format along with explicit break up of prices, Taxes & duties, Freight etc. **Third Part must be submitted through E-Tender system only.** **ONLY First part of the bid shall be in sealed envelope which shall be clearly marked as below:** **EMD - BG** **"Package Reference No"** Please mention our Enquiry Number: - CC24SVP039 on the Tender and drop the same in our Tender Box located at The Tata Power Company Limited (Tata Power) Corporate Contracts, Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station, Near Hotel Leela, Sahar Airport Road, Andheri (E), Mumbai 400 059.
12	REVERSE AUCTION	Tata Power reserves the right to conduct the reverse auction for the products / services being asked for in the tender. Only Technical Qualified Bids will be allowed to participate in e-auction. Date and time of e-auction will be intimated through E-Tender system to Authorized Person of Interested Bidder. Tata Power reserves the right to go for Reverse Auction (RA) for price negotiation and discover the most competitive price on ARIBA portal, Tata Power's official e-tendering platform. This will

		be decided after techno-commercial evaluation of the bids. Bidders need to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case Tata Power decides to go for RA. Only those bidders who are techno-commercially qualified shall be eligible to participate further in RA process. However, the original H1 bidder (whose price bid is the highest post techno-commercial evaluation) shall not be allowed to participate in further RA process provided minimum three techno-commercially qualified bids are available.
13	TPSDI TRAINING	To improve work safety and to ensure that all work force deployed at owner premises have the right orientation / induction and skills training before they undertake any work, the bidder shall accordingly plan and enrol his and sub-contractors work force to the respective skills / crafts training (Levels L1/L2/L3) offered by TPSDI. In addition to all prevailing safety practices bidder to take special note of following: 1. TPSDI training is mandatory. Each employee must undergo L1 training for 3 days. Depending on competency certain workmen will need L2 training which is for 2 days and L3 training which is for 3 days. 2. As per safety standards at Tata Power, Hydra is banned and Farhana or regular crane is accepted along with all statutory approvals i.e., Form 11 for tools and tackles, Driver Licence, PUC, Insurance etc. 3. Electric chippers are not allowed in wet / waterlogged areas. 4. Electric Submersible Pump Operation is not allowed when people are in the pit.
14	OTHER POINTS	BA to refer the Safety Terms & Conditions & Safety Annexure. These must be adhered to along with submission of acknowledgement copy. In case of award, the Purchase Order shall be issued digitally through Ariba Commerce Automation portal. In all such cases, further transaction such as Order Acceptance, SES / GRN preparation, Invoicing etc. needs to be conducted in the Ariba Commerce Automation system.

		The OLA quantity is only tentative. Actual order will be placed by user division against the OLA as per the following agreed T & Cs. Tata Power reserves the right to split the OLA between more than 1 bidders. Rest all Commercial Terms & Conditions shall be in accordance with Tata Power: General Conditions of Contract. ***Individual CRO value shall not be more than 15% of the total annual OLA value or 10 lakh (incl taxes) whichever is lower.*** ***Tata Power reserves the right to terminate the contract before completion of contract period if the contractor is not found suitable for the job.***
15	BIDDERS TO NOTE THE FOLLOWING INSTRUCTIONS FOR SUBMISSION OF BID	1) This tender consists of 02 Lots pertaining to different work locations (Kalyan Circle & Panvel Circle) Bidders may participate in any one or both the lots. However for any particular lots bidders to quote for the entire scope/all items. 2) Bid Evaluation (Technical, Safety & Commercial) shall be done separately for individual lots and award recommendation shall be accordingly. 3) Price bid schedule shall have separate sheets for individual lots. Price Bid evaluation shall be done for individual lots for which bidders have quoted. 4) In authorization letter/ EOI submitted, bidders to mention the respective lots for which they want to participate.

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Section D.4: ESG Framework for Business Associates

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ESG FRAMEWORK FOR BUSINESS ASSOCIATES

Tata Power's Sustainability philosophy sits at the core of its Business Strategy. Tata Power Sustainability Model has an overarching objective of 'Leadership with care' with key elements of 'Care for the Environment'; 'Care for the Community'; 'Care for our Customers / Partners' and 'Care for our People'. These sustainability objectives encompass the Environmental, Social and Governance objectives driven as integrated elements.

Tata Power, together with its stakeholders is determined to achieve sustainable growth while creating shared value for all.
As a part of future ready roadmap, Tata Power has targeted following as our Environment, Social and Governance priorities:

- Being Carbon Net Zero before 2045
- Growing Clean capacity (80% by 2030)
- Customer centricity
- Becoming water neutral before 2030
- Achieving zero waste to landfill before 2030
- No net loss of biodiversity before 2030
- Positively impacting 80 million lives by 2027

In order to create a sustainable business ecosystem, Tata Power expects that all its Business Associates (BA) which includes its suppliers, vendors, consultants and service providers to align to its ESG and sustainability commitments.

Tata Power encourages improved efficiencies and scaling up of green initiatives through technology and innovation taking us farther on the journey of reducing carbon emissions and preparing the entire eco-system towards products and services that would have net positive impact on the environment and communities that we operate in.

The Vendors/ bidders wishing to associate with Tata Power are expected to share their own sustainability and ESG journey. We at Tata Power promote all Business Associates to have a sustainable procurement policy for their supplier and service providers to contribute to our integrated approach in achieving a sustainable supply chain. The BA is encouraged to carry out the assessment of their sub-contractors and sub-vendors on sustainability readiness so that they are aware of the expectation/ business requirement.

The Vendor/ Bidder shall fill-in the 'Environment, Social and Governance Compliance Screening Questionnaire for Business Associates' attached at Annexure-I and submit the same along with the Bid in Ariba online platform.

Responsible Supply Chain Management:

Tata Power is committed for a cleaner environment and respect of Human rights through its Responsible Supply Chain Management policy.
Tata Power Business Associate (BA) shall comply with all the environment & Human rights related laws, including emission norms, Labour and environmental regulations.

Tata Power encourages its BA to focus on green design, green supply, green production, green logistics and green packaging in performing their business obligations. The BA is expected to abide by the Tata Power Corporate Environment policy, Energy Conservation and Corporate Sustainability Policy (enclosed with this document as Annexure-II).

The BA is expected to:

- Strive towards Conservation of Energy, Water, Resources and optimize transportation of Men & Materials to minimize environmental impact and reduce carbon footprint.
- Carry out the assessment of materials used for construction, operation & maintenance, consumables and accordingly phase out those materials which are environmentally hazardous.
- Be cognizant that diversity in the workplace positively impacts business.
- Promote affirmative action by supporting people from SC/ ST background by engaging workforce from SC/ ST community under the contracts agreed herein.
- Share the commitment of 'No child labour', 'No forced labour', Non-discrimination on the basis of caste, colour, religion, gender, disability, maternity or pregnancy or any other factor unrelated to the requirements of the job
- Pay the wages or remuneration to the workforce, personnel deployed in compliance to all applicable laws and regulations.
- Provide its employees/ deployed labor with an employment environment that is free of physical or psychological harassment.
- Carry out the assessment of their Sub-contractors on their Sustainability Readiness so that they are aware of the above expectation/ standards
- To ensure usage of suitable package material which is more environmentally sustainable. Further the packing material shall be recycled to the extent possible. The material used for packing is expected to suit the mode of transport and to ensure its safe receipt at point of delivery.

Waste Disposal:

The BA is expected to follow best practices for disposal of waste, few of which are listed below:

- Have a detailed project plan that includes the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/ destination in timely and safe manner as per environmental legislations. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise.

- Have purchase policy to encourage the procurement of material with recycled and minimum packaging of goods during delivery and appropriate means for site-to-site transportation of materials to avoid damage and litter generation.

- Ensure that the residents living near the site are kept informed about proposed working schedule and timings/ duration of any abnormal noise full activity that is likely to happen.

- Ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

Water Management:

The BA is expected to follow best practices for water management, few of which include a management and monitoring system for water withdrawals and consumption, procedures to reduce water usage or reuse/recycle water, and pretreatment of wastewater before disposal.

Compliance to Law:
The BA shall adhere to responsible business practices and comply with the provision of all the Statutory Acts Applicable. Special attention of the BA is drawn towards the compliance of provision of the following statues: (along with the latest amendments/additions, as applicable):

- The Child Labour (Prohibition and Regulation) ACT, 1986.
- The Contract Labour (Regulation and Abolition) ACT, 1970.
- The Employee's Pension Scheme, 1995.
- The Employee's Provident Funds and miscellaneous provisions Act, 1952.
- The Employees State Insurance Act, 1948.
- The Equal Remuneration Act, 1976.
- The Industrial Disputes Act, 1947.
- The Maternity Benefit Act, 1961.
- The Minimum Wages Act, 1948.
- The Payment of Bonus Act, 1965
- The Payment of Gratuity Act, 1972.
- The Payment of Wages Act, 1936.
- The Shops & Establishment Act, 1954.
- The Workmen's Compensation Act, 1923.
- The Employer's Liability Act, 1938.
- and any other applicable statutory act

Social Accountability (SA 8000):

Tata Power expects its BAs to follow guidelines of SA 8000:2014 on the following aspects

- Child Labour
- Forced or Compulsory Labour
- Health & Safety
- Freedom of Association & Right to Collective Bargaining
- Discrimination
- Disciplinary Practices
- Working Hours
- Remuneration
- Management System

Health and Safety

The BA is expected to ensure the health and safety of his and his Sub-contractor's staff and labour. The BA shall, in collaboration with and according to the requirements of the local health authorities, ensure that medical staff, first aid facilities, sick bay and ambulance service are available at the accommodation and on the Site at all times, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The BA shall maintain records and make reports concerning health, safety and welfare of persons deployed, and damage to property, as the Owner's Representative may reasonably require. The BA shall be responsible for the medical treatment / hospitalization of his and his Sub-contractor's staff/ labour.

The BA shall appoint a qualified Safety officer at the Site to be responsible for maintaining the safety, and protection against accidents, of all personnel on the Site. Such Safety officer shall have the authority to issue instructions and take protective measures to prevent accidents.

The BA shall comply in toto with the Tata Power's Contractor Safety Terms & Conditions, Health Safety & Environment Manual while working on Tata Power Site/ Services/ Contracts.

Grievance Mechanism

The BA is expected to have grievance procedures that allow stakeholders to anonymously bring environmental and/or work-related violations and/or concerns to the attention of management. In addition, the BA is expected to have procedures for examining reports of environmental and/or work-related violations or concerns and/or privacy complaints.

Data Protection

The BA is expected to have a formal process to address data security or privacy issues.

ANNEXURE-I

TATA

TATA POWER

Sr. No.	Question Description	Response (Y/N)	Remarks
Organization			
1	Does your Company have Sustainability Policy at Organization Level? If Yes, Please attach		
2	Do you have sustainable procurement policy in place for your own suppliers? If Yes, Please attach		
3	Does your company do regular assessment of its suppliers on ESG parameters?		
4	Are there ESG risks, or negative impacts identified in your supply chain		
Governance			
1	Is diversity taken into consideration when appointing board members/ senior management? Do you have an independent director/s?		
2	Has your company taken initiatives to ensure ethical practices at workplace? Please share the details, Policies etc.		
3	Does your company have a formal process to address data security or privacy issues? Please share the details, Policies etc.		
4	Does your company have grievance mechanism for stakeholder issues and track resolution?		
Environment/ Planet			
1	Does your company have Environmental Policy? If Yes, Please attach		
2	Do you have a formal process for waste management including solid wastes, liquid wastes and hazardous waste?		
3	Does your company track greenhouse gas emission? Also, what percentage of own consumption comes from the renewable energy?		
4	Does your company have a formal process for water management including monitoring of water consumption and withdrawals, and if applicable, pretreatment of wastewater?		
Green Technology/ Innovation			
1	Are your facility/ Product/ Services provided by you is based on green design, green production, green packaging or green logistics considerations? Please elaborate.		
2	Do your products or services have any environmental or social features or benefits (e.g. environmental/energy certification, ecolabels, fair trade certification, etc.)?		
Social/ People			
1	Does you facility/ Company have written personnel policies in place Are you an equal opportunity employer?		
2	Please describe any formal programme / campaign in place to promote company involvement with the community (volunteering, etc.). What is the percentage of profit spend on community activities?		
3	Does your company have a written Health & Safety Policy or Program? If Yes, Please attach		
Certifications: Does your company have following certifications (valid till date-please mention validity)			
1	ISO9001 accreditation		
2	SA8000 or equivalent		
3	ISO 14001 certification		
4	ISO 18001/45001 or equivalent		
5	ISO/IEC 27001 or equivalent		
6	Any Other (Please specify)		

Signature

Business Associate Name

ANNEXURE-II

CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
    - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
    - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
    - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
    - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
    - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER
Lighting up Lives!

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Section D.5: Price Bid Format

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OLA of 03 years for Civil maintenance work at Kalyan & Panvel Circle at Tata Power Transmission, Mumbai						
					Y-O-Y escalation for 2nd year and 3rd year for Kalyan	
					Y-O-Y escalation for 2nd year and 3rd year for Panvel	
SR NO.	Civil Maintenance Works works for Kalyan Node	All Inclusive Value for 1st year	Grand Total Second Year (All Incl Price)	Grand Total Third Year (All Incl Price)	GRAND TOTAL FOR PACKAGE (All Inclusive Price) - INR	
A	Kalyan Node					
1	Kalyan Cricle	0	-	-	-	
2	Panvel Cricle	0	-	-	-	
Total All-Inclusive Value for Three Years					-	
Note:- The quantity of work for 2nd year and 3rd year will be same as per 1st year.						

Civil Maintenance Works- Transmission Division- Kalyan Circle, Kalyan Node.

Sr. No	Short Text	Description	Quantity for 1st year	UOM	1st Year	
					Rate (INR)	Amount (INR)
A. Civil Work in Non Operational Area						
1	Excavation 0-1.5 m, disposal inside	Excavation in all types of ordinary soils including dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 0 to 1.5 mtrs deep within basic lead of 100 mtr (rate does not include payment against royalty and debris management cell charges)	20	M3		0
2	Excavation 0-1.5 m disposal outside	Excavation from 0 to 1.5 meter in all types of ordinary soils (natural / backfilled) including dewatering and depositing / stacking of all materials, removal of wild growth vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth material to authorized dumping sites outside owner#s	20	M3		0
3	Excavation 1.5-3 m, Disposal inside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials, removal of vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs and unloading the excavated material to authorized dumping sites inside owner#s premises.	12	M3		0
4	Excavation 1.5-3 m Disposal outside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs deep, rate shall be inclusive of dispoing surplus material to authorized dumping sites outside owner's premises.	12	M3		0
5	Collector permission for excavation	Obtaining collector permission for excavation for which tata power will provide the available documents. Official payment will be done by tata power on receipt demand note	25	M3		0
6	Excavn. in hard rock by JCB breaker	Prov. Services for excavation in hard rock using JCB breaker as directed by EIC and disposing debris outside tata power premises at authorized site outside owner's premises	12	M3		0
7	Prov. Cartage services	Providing cartage service & transporting, excavated soil, debris, bricks, concrete, dry garbage etc.and disposing off to municipal corporation area approved dumping sites outside premises incl submission of relevant documents. Note: measurement will be made on truck measurement.	25	M3		0
8	Backfilling with site material	Providing services for backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer with local earth available at site	25	M3		0
9	Supplying & filling with murrum	Supplying good quality murrum free from gravels & boulders, backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer, excluding use of JCB as per instruction of EIC	25	M3		0
10	P/L dry rubble soling	Providing and laying dry rubble soling of basalt stone or black trap stone or locally available strong stones with approved quality stones including filling gaps with small chips ramming with hand rammer etc. Complete.	25	M3		0
11	Rubble soling with site material	Laying of rubble soling with material available at site within 50 m lead, rate shall be inclusive of man, shifting of material manually, laying as per line & level, filling interstices with small chips and laying layer of crushed sand or good quality murrum	25	M3		0

12	Demolishing brick masonry	Providing all necessary tools tackles services etc for demolishing brick masonry of variable thickness with plaster and disposing off the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	12	M3		0
13	Breaking PCC	Providing all necessary tools tackles services etc for demolishing PCC and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer., rate shall be inclusive of storing debris up to 200 m lead until taken for disposal	12	M3		0
14	Breaking pointing	Providing all necessary tools tackles services etc for breaking pointing and disposing of the debris to the approved dumping ground of municipal corporation area / outside owner premises etc complete as per specifications and as directed by the engineer	12	M3		0
15	Demolishing RCC	Providing all necessary tools tackles services etc for demolishing all types of RCC structures at floor level manually or by means of chipper breaker (exclusive of air compressor breaker / JCB breaker / Poclain breaker) including transportation of debris, cutting of reinforcement, disposing salable scrap material to the tata power stores etc. Complete as per the requirement of drawing and as directed by the site-engineer and disposing of the debris to the outside company premises etc complete	12	M3		0
16	Breaking cement / lime plaster	Providing all necessary tool tackles services etc for breaking plaster of all thicknesses as directed by the site-engineer and disposing of the debris to the approved dumping ground of municipal corporation outside company premises etc complete as per specifications and as directed by the engineer	20	M2		0
17	Breaking of asphalt road (BC & DBM)	Providing all necessary tools tackles services etc for breaking asphalt road and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	20	M3		0
18	Breaking asphalt road incl. macadam	Providing all necessary tools tackles services etc for breaking asphalt road including macadam layer, soling etc. (all thickness) and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.,asphalt road including metalling, soling etc. (all thickness)	20	M3		0
19	Dismantling structural steel	Providing all necessary tools tackles & services for dismantling structural steel sections i.e. Angles / channels / beams / plates etc (not inclusive of ferrana / crane) & returning the same to nearest tata power stores or designated place etc complete as directed	10	MT		0
20	Removing Door / windows / louvers	Providing all necessary tools tackles services etc for removing all type of doors/windows in good condition & returning to the nearest tata power stores with necessary documentation etc. Complete as directed by the engineer	20	M2		0
21	Removing chainlink fencing	Providing services for removal of chain-link fencing including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever required.	125	M2		0
22	Removing Barbed wire	Providing services for removal of Barbed wire including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever required.	150	M		0

23	Removing concertina coil	Providing services for removal of concertina coil including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever required.	150	M		0
24	REMOVING OF AC/GI/FRP SHEET	Providing all necessary tools tackles & services for removing old AC / GI / FRP sheets from existing shed or boundary & returning to the tata power stores etc complete as directed	150	M2		0
25	Breaking of tile work	Providing all necessary tools tackles services etc for breaking of flooring & dado tiles as directed by the site-engineer and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.	37	M2		0
26	DISMANTLING PARTITION	Providing services for dismantling aluminum / wooden / annealed glass / toughen glass partition at all heights & depositing it to tata power stores or scrap yard as directed by engineer	37	M2		0
27	Dismantling Gypsum Partition	Providing services for dismantling gypsum board partition at all heights including support structure & depositing it to tata power stores or scrap yard as directed by engineer	37	M2		0
28	Removing False ceiling incl support	Providing services for dismantling grid type / gypsum false ceiling including supporting arrangement, depositing saleable scrap to tata power stores & disposing remaining debris outside tata power premises at own risk.	37	M2		0
29	Dismantling false ceiling	Providing services for dismantling of false ceiling (grid & board type) excluding supports and disposing it outside tata power premises	37.5	M2		0
30	Dismantling of false flooring	Providing services for dismantling of false flooring including supporting arrangement using required tools and tackles and shifting it to tata power scrap yard	25	M2		0
31	DISMANTLING CONCEALED PLUMBING LINE	Providing services for dismantling concealed plumbing line of any dia, by breaking tile / plaster as required, depositing wastage to stores or as directed by EIC / reusing it at site	20	M		0
32	Removing PVC pipe line	Providing services for wall mounted / concealed sewage / drainage line, disposing material outside Tata power premises at approved dumping ground	25	M		0
33	Removing EWC	Providing services for removing floor mounted / wall mounted EWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	5	EA		0
34	Removing IWC	Prov. Services for removing IWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	5	EA		0
35	Removing wash basin	Prov. Services for removing counter top / wall mounted wash basin of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	5	EA		0
36	Removing urinal	Prov. Services for removal of urinal and disposing it to outside tata power premises	7.5	EA		0
37	Removal of roller / vertical blinds	Prov. Services for removal of roller blind / venetian blind / vertical blind. Blinds must be removed with support channel & must stored in condition that it can be reused in as it is condition	25	M2		0
38	Demolishing kadappa / granite	Providing services for dismantling stone work such as kadappa / granite / marble or similar stone except kota, rate shall be inclusive of removal of mortar bedding if laid on kitchen platform & disposing outside tata power premises at designated local municipal authority dumping ground	37.5	M2		0

39	Dismantling railing	Providing servcies for dismantling any type of railing (SS / MS / GI ; single rail or double rail) and disposing it to tata power stores, rate shall be inclusive of man, material, tools such as gas cutting set / grinder cutter, shifting to stores so as to complete the job	12.5	M		0
40	Dismantling rolling shutter	Prov. Services for dismantling rolling shutter of any height & width including disposing it to tata power stores, payment for scaffolding to be paid extra if done more than 2 meter high	20	M2		0
41	Dismantling MS gate	Removing any type of ms gate and disposing it to stores scrap yard within 200 meter lead	20	M2		0
42	Removing & disposing paver block	Removal of existing paver blocks 60 - 80 mm thick & sand bedding and disposing outside tata power premises at designated local municipal authority	20	M2		0
43	Removing & stacking paver block	Removal of existing paver blocks 60 - 80 mm thick including sand bedding and stacking in owner premises within 200 meter lead	20	M2		0
44	Replacement of trench cover	Prov. Services for removal of existing trench cover and laying new trench cover, rate shall be inclusive of man, material, tools for replacement of trench cover but excluding of casting trench cover	25	EA		0
45	Prov. & laying PCC M-10	Supplying, providing and laying in position M - 10 plain cement concrete in levelling course/fill under or around foundations pits. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix	12.5	M3		0
46	Prov. & laying PCC M-15 (site mix)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix / mixer machine	3	M3		0
47	Prov. & laying PCC M-15 (RMC)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	30	M3		0
48	Prov. & laying PCC M-20 (site mix)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mixer machine	30	M3		0
49	Prov. & laying PCC M-20 (RMC)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: RMC	20	M3		0
50	Prov. & laying PCC M-25 (site mix)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mixer machine	30	M3		0
51	Prov. & laying PCC M-25 (RMC)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	30	M3		0

52	Prov. & replacing, precast RCC, M25	Providing and replacing of precast reinforced cement concrete structure, grade: M25, max w/c ratio: 0.5, rate to include shuttering, vibrating, machine mixing, providing lifting arrangement, placing insert curing handling, transporting with down graded aggregate: 20	25	M3		0
53	Prov. & laying PCC M-30 (RMC)	Supplying, providing and placing in position reinforced cement concrete of grade M30 with 20mm down graded aggregate for works below grade levels including vibrating, curing, de-watering wherever necessary, providing construction joints, leaving cut outs / pockets, placing of inserts/ embedment, etc., complete, including cost of providing, fixing and removing form work for all shapes (including scaffolding, centering etc) but excluding cost of providing reinforcement as directed by the engineer	20	M3		0
54	P/ L M-25 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M25 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	12.5	M3		0
55	P/ L M-20 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M20 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	12.5	M3		0
56	Prov. & laying plum concrete M - 15	Providing and placing in position plum concrete of required thickness, at all depths with 33% boulders of size 150mm to 230mm and 67% ready mix concrete of M15 grade including shuttering, vibrating, compacting, curing, dewatering, levelling, finishing, removal of formwork, etc. Complete as per specifications/drawings and as directed by the engineer-in-charge.	12.5	M3		0
57	Prvov. & const. Brick masonry 230mm	Providing all material and constructing brick masonry 230mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	12.5	M3		0
58	Prov. & const Brick Masonry 115mm	Providing all material and constructing brick masonry 115mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	12.5	M2		0
59	P/L uncoursed rubble masonry	Supplying, providing and laying, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer.	12.5	M3		0
60	Laying UCR masonry - rubble at site	Prov. Services for laying including tools tackles, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer., rubble to be brought from 50 m lead	12.5	M3		0
61	P/L pitching stone work	Providing all material for dry stone pitching : providing all the materials and laying 225 mm thick. Dry rubble pitching at all heights to correct line and level dry stone pitching with individual stones of 22 cm depth and minimum size 0.014cum. Complete with all leads and lifts for all materials and machinery including all charges and as directed by engineer-in-charge	12.5	M2		0
62	CLC/AAC/Siporex block masonry - 4"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness - 100 mm)	12.5	M2		0

63	CLC/AAC/Siporex block masonry - 8"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness # 200 mm)	12.5	M2		0
64	Making pocket, 300x300x150mm	Making of pocket, size:300 x 300 x 150 mm, at all levels with staging including grouting with cm 1:3 in concrete/masonry, debris must be disposed outside owner's premises at municipal corporation approved dumping yard	12.5	EA		0
65	P/A Internal plaster 12 mm	Providing 12mm. Thick smooth finished cement plaster in cement mortar (1:3) for RCC, brick work, sides and undersides of the slabs, canopies, chajjas with drip molding etc. Including scaffolding, curing, etc. Complete as per specifications.	25	M2		0
66	P/A external plaster 20mm	Providing all materials and carrying out sand faced plaster 20 mm thick in two layers (first layer of 14 mm and second layer of 6 mm thickness) with waterproofing compound. Including bands drip molds in cement mortar 1:4 including scaffolding (the rates shall include provision for chicken mesh 230 mm wide at the junction of masonry with RCC).	25	M2		0
67	P/A ready mix plaster - 20 mm	Prov. & applying ready mix plaster of Godrej make tuff Duro Plast / ACC make Suraksha ready to use plaster 101 or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, application and finishing of surface, curing	25	M2		0
68	P/A Raised or flush cement pointing	Providing all the materials and carrying out raised or flush cement pointing in 1:3 cement mortar including providing and erecting steel scaffolding (up to 2 meter), curing, edge finishing	25	M2		0
69	P/L IPS flooring- 75 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete including as per line & level required, finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 75 mm thick	25	M2		0
70	P/L IPS flooring- 50 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete as per line & level required, including finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 50 mm thick	25	M2		0
71	P/L floor tiles (800 x 800)	Providing and fixing 800 x 800 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and jointed with tile grout of ROFF / equivalent make, cutting of tiles to required size, cleaning, curing, etc. Complete.	12.5	M2		0
72	P/L floor tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and filling joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	37.5	M2		0
73	P/L wall tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	20	M2		0
74	P/L wall tiles (300 x 600)	Providing and fixing 300 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	12.5	M2		0
75	P/L acid resistant tiles	Providing all materials, tools, tackles & services for supplying & fixing acid resistant tiles. Scope includes 1) applying epoxy primer & allow it dry for 24 hr. 2) fixing the tiles by applying 5-8 mm thick paste made up from mixture of VIKO proof-SDK cement powder or equivalent sodium silicate cement powder & VIKO proof-SDK liquid binder or equivalent liquid binder in proportion of 1:3. 3) joints & gaps to be filled with VIKO proof ep-epoxy resin cement or equivalent acid	25	M2		0

76	P/L tile on existing tile-vitrified	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive up to 10 mm thick layer for vitrified tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent make of tile grout	12.5	M2		0
77	P/L tile on existing tile (ceramic)	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive upto 10 mm thickness for ceramic tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent make of tile grout	12.5	M2		0
78	P/F kota stone ,25mm thick	Providing and fixing at least 25 mm thick machine cut machine cut kota stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3)	32.5	M2		0
79	P/F white marble,15mm	Providing and fixing at least 15 mm thick machine cut machine cut white spotless marble stone of any sizes for windows / door jambs / lintel / sill with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	12.5	M2		0
80	P/F black granite stone,15mm	Providing and fixing at least 15 mm thick machine cut machine polished pitch black granite stone of any sizes for counter / cooking/platform with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, full bull nose or double bull nose molding & polishing of edges & redoing in cm (1:3)	12.5	M2		0
81	P/F Baroda green stone 15 mm	Providing and fixing at least 15 mm thick machine cut machine cut Baroda green stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	12.5	M2		0
82	Mirror polishing of kota/mosaic	P/s for mirror polishing of kota / mosiac flooring preceded by machine polish to bring level on joints and edges if required	20	M2		0
83	P/L Granite for sill / staircase	Providing and fixing 15 mm thick black granite on window sill, staircase tread & riser, 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of marble, raking and finishing the joints with silicon sealant, curing, rubbing, polishing and cleaning complete at all levels 2nos in steps with minimum 50mm overlapping and maximum of 300mm width in combination.	12.5	M		0
84	Edge molding	Prov. Services for molding of edge - bull nose or demi bull nose for all type of stones	12.5	M		0
85	P/F Paver block - 60 mm	Providing and fixing interlocking concrete paver blocks of 60mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties, octroi etc.the testing of paver block	12.5	M2		0
86	P/F paver block - 80 mm	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties, octroi etc.the testing of paver block	12.5	M2		0

87	Lay paver block available at site	Prov. Services for laying paver blocks available at site within 50 meter lead, rate shall be inclusive of shifting or transporting for given lead, 40 mm thick sand bedding, filling joints with sand	12.5	M2		0
88	P/F M 30 - 100 mm paver block	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties, octroi etc.the testing of paver block	12.5	M2		0
89	Prov. & fixing kerb stone M 20	Prov. & fixing kerb stone of size 150 x 300 mm made of M20 grade of concrete conforming to is 5758 (1994) (type 1d), rate shall be inclusive of man, material, transportation, hacking / breaking of PCC / asphalt, laying mortar (1:1) bedding to line and level, cutting / breaking of kerb stone to size and finishing joints with neat cement, housekeeping and disposal of debris outside tata power premises	12.5	M		0
90	P/L paver tile 20 mm	Prov. & laying 20 mm thick paver tile of M 20 grade on average sand bedding of 50 mm thickness to the line and level, rate shall be inclusive of man, material, transportation, tools, joint filling with sand so as to complete the job	12.5	M2		0
91	Sup/Fab/Placing Reinforcement Steel	Providing & binding reinforcement steel of any dia including binding wires, cleaning, bending, cutting, hoisting, placing in position, lapping and binding with 16 SWG annealed soft iron wire or tack welding reinforcement steel for all types of RCC work irrespective of locations & levels all as per drawings including handling and transporting steel from nearest stores to site complete as directed for HYSD bars.(FE-500 conforming to IS code 1786-1985).	5	MT		0
92	Fab & Erect Structural Steel Work	Fab & erection all types of mild steel, work at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel (excluding chequered plate)	7.5	MT		0
93	Prov./ Supply /Fab structural steel	Providing & fabricating & erecting all types of structural steel, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of steel(excluding chequered plate)	12.5	MT		0
94	Fab & Erect GI Work	Fab & erection all types of GI work, at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel (excluding chequered plate)	2.5	MT		0
95	Prov/Supply/Fab Structural Steel#GI	Providing & fabricating & erecting all types of GI material, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of steel(excluding chequered plate)	5	MT		0

96	P/F 16 SWG SS Wire Mesh	Providing all tools, tackles, materials for fixing of 16 SWG SS wire mesh of opening size 12.5 mm x 12.5 mm fixed with 12 mm U bolts as mentioned in the drawing or as directed by EIC at any height incl scaffolding, ladder, machinery etc.	12.5	M2		0
97	P/F/E Structural Steel(Tube & pipe)	Providing & fabricating & erecting all types of MS tubes & pipes, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of steel(excluding chequered plate)	2.5	TO		0
98	P/F MS Chequered Plate - 6 mm	Providing & fabricating & placing MS chequered plate - 6 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of steel	12.5	M2		0
99	P/F MS Chequered Plate - 8 mm	Providing & fabricating & placing MS chequered plate - 8 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of steel	25	M2		0
100	P/F MS Chequered Plate - 10 mm	Providing & fabricating & placing MS chequered plate - 10 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of steel	25	M2		0
101	P/F MS Grill	Providing, fabricating and erecting MS grills consisting of 12mm square rods with external frame of 20x6mm flats with safety flip door including applying one coat of primer & 2 coats of enamel paint to all the exposed surfaces of steel. Design will be as per AOC palette. All the required steel will be supplied by contractor. Contractor shall use his own welding set, gas cutting set with accessories, gas and electrodes to complete the entire work, as per the direction etc complete	12.5	M2		0
102	P/F GI Grating	Supplying and laying of grating, material: hot dip galvanized iron and providing all necessary material, tools, tackles & services, outer frame plate size: 40 x 6mm, short span plate size: 40 x 5 mm, bracing plate size: 40 x 5 mm and spacing of plate size: 40 mm	12.5	MT		0
103	P/F/E Al Chequered Plate 8 mm	Providing & fixing aluminum chequered plate of 8 mm thick with lifting arrangement cut provided as directed by EIC,	12.5	M2		0
104	P/F/E Al Chequered Plate 10 mm	Providing & fixing aluminum chequered plate of 10 mm thick with lifting arrangement cut provided as directed by EIC,	12.5	M2		0
105	P/F/E GI Tubular Handrail 2 Rail	Supplying, fabricating & erecting C class GI tubular h&railing of 32 mm dia. Nb medium class, consisting of double GI rail with top GI rail 1 mtr above floor level, mid rail at 600 mm from floor & pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary bends, GI tee joints, GI fixtures, GI fittings, 100 mm x 6 mm toe guard including applying one coat of primer & two coats of synthetic enamel excluding anchor fastener as directed by	12.5	M		0

106	P/F/E Single Rail C Class GI Pipe	Providing & fixing single handrail of C class GI pipe of 32 mm dia and connecting with wall with all necessary GI bends, GI tee joints, GI fixtures such as plate for connection at wall, the assembly should be sturdy and with smooth surfaces at joints/ junctions.	12.5	M		0
107	P/F/E Tubular Handrail - SS 2 Rail	SS pipes 304 mat finish /brush steel finish ss tabular handrailing consisting of double SS rail with top SS rail 1 mtr above floor level and pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary SS bends, SS tee joints, SS fixtures, SS fittings,100 mm x 6 mm ss toe guard excluding anchor fastener as directed as directed by engineer	12.5	M		0
108	P/F/E Tubular Handrail - SS 1 Rail	SS pipes 304 mat finish /brush steel finish consisting of one SS rail and connecting with wall with all necessary SS bends, SS tee joints, SS fixtures, SS fittings, the assembly should be sturdy and with smooth surfaces at joints/ junctions. All SS sections, pipes etc to be supported with documents for the quality	12.5	M		0
109	P/F/E SS Hand Rail - 4 Rail	Providing & fixing SS hand rail made of SS 304 satin finish of 1.5 mm thickness, with top rail of SS hollow pipe 50 mm dia and bottom 3 made of SS hollow pipe of 25 mm dia, supported by 50 mm dia @ 1.2 m c/c using bracket as per AOC palette, including cutting, bend, finishing of joints & bends, installation using required screws so as to complete the job	12.5	M		0
110	P/F/E MS Gate - Chainlink	Providing & fabrication of MS gate in single / double leaf with ISA 65 x 65 x 6 mm angle frame, both side MS flat of 10 mm x 6 mm to hold chainlink, 9 gauge chainlink within frame and painted by 2 coats of synthetic enamel preceded by red oxide primer, including hinges, MS aldrop, welding, gas cutting, shifting with 200 meter	12.5	M2		0
111	P/F/E Square Pipe MS Gate	Providing ,fabricating & erecting in position gate made of hollow box section as per the approved drawing using steel confirming to IS 2062/IS:1161 including supply of all materials such as hinges, locking arrangement, plunger bolts, SS wheels & fixtures, MS flat plate for wheels with anchors, making of wicket gate ,vision panel etc incl. of 2 coats of synthetic enamel paint with one coat of primer. (outer frame 90 x 60 x 3 mm, inner pipes - 25 x 25 x 3 mm, 3 nos. 100 mm hinges on each	6.25	M2		0
112	P/F/E 3mm Thick GI Perforated Sheet	Providing & fixing 3 mm thick GI perforated sheet with 50% opening holes, rate shall be inclusive of man, material, transportation, installation of sheet using tack weld or nut bolt as per site requirements, wastage and fixing sheet to line, level and alignment	12.5	M2		0
113	P/F pin type Anchor Fastener,16mm	Providing & fixing 16 mm dia, 100 mm long pin type anchor fasteners, including drilling the holes (other than HILTI)	37.5	NO		0
114	Anchor Fastener-HILTI HSA 12X100 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 100, rate shall be inclusive of drilling & fixing	12.5	NO		0
115	Anchor Fastener-HILTI HSA 12X145 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 145, rate shall be inclusive of drilling & fixing	12.5	NO		0
116	Anchor Fastener-HILTI HSA 12X175 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 175, rate shall be inclusive of drilling & fixing	12.5	NO		0
117	Anchor Fastener-HILTI HSA 16X102 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 102, rate shall be inclusive of drilling & fixing	12.5	NO		0
118	Anchor Fastener-HILTI HSA 16X137 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 137, rate shall be inclusive of drilling & fixing	12.5	NO		0
119	Anchor Fastener-HILTI HSA 16X182 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 182, rate shall be inclusive of drilling & fixing	12.5	NO		0
120	Anchor Fastener-HILTI HST2-R 12x105	Providing & fixing HILTI make anchor fastener HST2-R 12 x 105, rate shall be inclusive of drilling & fixing	12.5	NO		0
121	Anchor Fastener-HILTI HST2-R 12x145	Providing & fixing HILTI make anchor fastener HST2-R 12 x 145, rate shall be inclusive of drilling & fixing	12.5	NO		0
122	Anchor Fastener-HILTI HST2-R 16x140	Providing & fixing HILTI make anchor fastener HST2-R 16 x 140, rate shall be inclusive of drilling & fixing	12.5	NO		0
123	Anchor Fastener-HILTI HST2-R 16x170	Providing & fixing HILTI make anchor fastener HST2-R 16 x 170, rate shall be inclusive of drilling & fixing	12.5	NO		0
124	P/L Manhole Cover (LD 2.5) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0

125	P/L Manhole Cover (LD 2.5) 450X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 450 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
126	P/L Manhole Cover (MD - 10) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (medium duty 10 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
127	P/L Manhole Cover (HD - 20) 900X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 900 x 450 (heavy duty 20 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
128	P/L Manhole Cover 300 X 300	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 300 x 300 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
129	Replacement of Hinge of MS Gate 6"	Providing & replacing of hinge of gate, material: 6 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by enGIneer incharge.	7.5	EA		0
130	Replacement of Hinge of MS Gate 4"	Providing & replacing of hinge of gate, material: 4 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by engineer in charge.	7.5	EA		0
131	Ser. F/Greasing - Rolling Shutter	Providing material, labor and service for oiling and greasing of shutter, rates are inclusive of providing scaffolding	5	M2		0
132	Making Wicked Gate - Rolling Shutter	Providing all tools and tackles for making wicked gate in existing shutter at all levels and height, rate is inclusive of cutting, welding, all required material and scaffolding	3	M2		0
133	Repairing Gear Operator Shutter	Repairing steel rolling shutters of gear operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc.	5	M2		0
134	Repairing Hand Operator Shutter	Repairing steel rolling shutters of hand operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc.	5	M2		0
135	P/F Rolling Shutter Motor - 1 KV	Providing and fixing of electric motor of set 1KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	2.5	EA		0
136	P/F Rolling Shutter Motor - 1.5 KV	Providing and fixing of electric motor of set 1.5 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall include loading ,transportation and unloading of materials at site or as directed by EIC	2.5	EA		0
137	P/F Rolling Shutter Motor - 2 KV	Providing and fixing of electric motor of set 2 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	2.5	EA		0
138	P/F Rolling Shutter	Providing and fixing mechanically operated rolling steel shutters fabricated from 18G GI sheets with slide guides, bottom rail, brackets, door suspension shaft, housing box at operation arrangement, lock plates, locking arrangement, fixing bolts, pulling handles, hood, rolling arrangement & 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. wicket gate shall be paid under separate item, in that case area of wicket gate shall be deducted from this item for payment.	5	M2		0

139	Ser. for fab work- incl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, gas cutting set including gas consumption, all tools and tackles required for performing the fabrication job	2.5	DAY		0
140	Ser. for fab work- excl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, manpower, all tools and tackles required for performing the fabrication job	2.5	DAY		0
141	P/F/E Tray C- 150 Mm	Providing, fabricating and erecting of tray c shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 150 mm	12.5	M		0
142	P/F/E Tray C- 300 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 300 mm	12.5	M		0
143	P/F/E Tray C- 450 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 450 mm	12.5	M		0
144	P/F/E Tray C- 600 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 600 mm	12.5	M		0
145	Serv. Stretching chainlink fencing	Providing Services for stretching chain link fencing at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the job	25	M2		0
146	Serv. for Stretching barbed wire	Providing Services for stretching barbed wire at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the job	75	M		0
147	Serv for stretching concertina coil	Providing Services for stretching concertina coil at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the job	25	M		0
148	P/S GI chainlink fencing- 8 gauge	Providing & stretching GI chain link fencing of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter, including one coat of zinc primer and followed by two coats of synthetic enamel paint	25	M2		0
149	Prov./strech PVC coated chainlink	Providing & stretching PVC coated chain link fencing of bare GI chain link of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter	25	M2		0
150	Providing & fixing barbed wire	Providing & stretching IOWA type GI barbed wire conforming to IS 278: 2009 with 14 SWG x 14 SWG (main wire & barb wire) with spacing of barb at max. 5 inch c/c at required line & level including man, material & transportation	75	M		0
151	P/stretch concertina coil 610mm dia	Providing & stretching concertina coil PVC coated / GI concertina coil 610 mm having medium barbs of 20 mm width, max 8 circle of coil per meter, guided by 16 SWG guide wire on both sides, including transportation, manpower, cutting - lifting & placing	25	M		0

152	P/F galvalume sheet 0.5 mm thick	Providing, placing & fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coat thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, zinc aluminum alloy coated (zinc aluminum coating not less than 150g/sqm), MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting & SMP coating of DFT 5 microns over 5 micron primer	37.5	M2		0
153	P/F Galvalume sheet 0.65 mm thick	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.65 mm total coated thickness to match existing shade (bare galvalume thickness 0.6mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	37.5	M2		0
154	P/F Precoated Galvanized Iron sheet	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coated thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	37.5	M2		0
155	P/F Al patti 50 mm	Providing & fixing aluminum flat of 50 x 6 mm on roof sheet, rate shall be inclusive of man, material, GI threaded screw with rubber washer, drilling hole @ 2m c/c	12.5	M		0
156	P/F GI corrugate sheet , 16 gauge	Gi sheet providing & fixing 16 gauge corrugated GI sheet on roof & cladding with GI bolts, nuts, washers, sealant on bolt etc. complete as directed.	7.5	M2		0
157	P/F 3 mm thick FRP sheet, plain	Providing & fixing 3 mm thick plain FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	7.5	M2		0
158	P/F 3mm thick FRP sheet, corrugated	Providing & fixing 3 mm thick corrugate FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	7.5	M2		0
159	Fixing of GI / Galvalume/FRP sheet	Providing all necessary tools tackles & services for fixing GI / galvalume/FRP sheets, rates shall be inclusive of manpower, tools, tackles, scaffolding (up to 4 meter) self tapping polymer coated screw with rubber washer / j bolt with washer & nut, shifting lead up to 200 meter	12.5	M2		0
160	Supply of tarpaulin sheet	Supplying only of tarpauline sheet of 200 GSM of any size and shade as directed by engineer in charge. Rate shall include the cost of transportation, loading, shifting and unloading of material at site and handing over the material to person designated by respective division in charge with documentation. this item is exclusive of spreading of tarpaulin sheet.	12.5	M2		0
161	Spreading of tarpaulin sheet	Providing services for spreading of tarpaulin sheet of 200gsm at any height/sheet/terrace inclusive of making tying arrangement using 12mm polypropylene/nylon rope, rate shall be inclusive of man, material, transportation, ladder, scaffold to complete the job, payment will be made against area covered by tarpaulin, not the area of tarpaulin sheet used. Tarpaulin sheet supplied by tata power.	12.5	M2		0
162	P/F monsoon shed of tarpaulin sheet	Providing all tools, tackles and material for erecting monsoon shed for a period of 05(five) months and maintaining the same for the period. Bamboo frame work shall be made for laying 200 GSM tarpaulin sheet shed with vertical supports max. 1.00 m c/c & lateral support at max. 1.00 m c/c. All vertical supports should be of approx. 60 mm to 80 mm dia. The rate shall also include dismantling of the monsoon shed. The rate also includes obtaining necessary permission from MCGM.	37.5	M2		0

163	P/F PVC gutter 7 inch	Providing and fixing half round 180 mm uPVC gutter with rubber seal SWR grade-prince or equivalent make inclusive of joint brackets/running outlet/elbows/short stop end/stop end outlet/support bracket/pipe clamp or clamp/side or top bracket rate shall be quoted for man, material, transportation, scaffolding (up to 4 m), machine, screw so as to complete the job	7.5	M		0
164	P/F Wall Mounted EWC - Office WR(1)	Providing & fixing wall mounted EWC Hindware make studio series windsor (cat no. 20061) or Parryware make indus walvit series (C0255)	2.5	EA		0
165	P/F Wall Mounted EWC- Office WR(2)	Providing & fixing wall mounted EWC of Jaquar make DRS - WHT - 37591 or ARS - WHT - 39951UFSM along with slim seat cover with soft closer, bracket, finishing the side with near white cement	2.5	EA		0
166	P/F Floor Mounted EWC	Providing & fixing floor mounted EWC Hindware make universal series (20012) or Parryware make c0271 /	2.5	EA		0
167	P/F IWC	Providing & fixing Indian WC Orrisa pan popular (Hindware make -- 20043) or orrisa pan c0117 (Parryware make)	2.5	EA		0
168	P/F Urinal (Opt 1)	Providing & fixing urinal Hindware make cat no. 60011 or Parryware make new magnum c0575	2	EA		0
169	P/F Urinal - (Opt 2)	Providing & fixing Urinal Hindware make Corto standard (Cat no. 60022), rate shall be inclusive of man, material, tools, bracket, connection with plumbing & drainage line so as to complete the job	2	EA		0
170	P/F Wall Mounted Wash Basin	Providing & fixing wall mounted washbasin Hindware make studio series (Cat no. 10096) along with bracket, connections with plumbing & drainage line using applicable flexible hose & pipe	2.5	EA		0
171	P/F Under Counter Rim Wash Basin	Providing & fixing Hindware make under counter washbasin (cat no. 10065) or Parryware make c0419, along with CP coupling	2.5	EA		0
172	P/F Counter Top Wash Basin (Jaquar)	Providing & fixing Counter top wash basin Jaquar make - JDS - WHT - 25935, rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	2.5	EA		0
173	P/F Counter Top Washbasin(Hindware)	Providing & fixing Counter top wash basin Hindware make monalisa over counter basin (cat no. 10069), rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	2.5	EA		0
174	P/F Flush Tank	Providing & fixing Hindware make sleek elegance dual flush tank	2.5	EA		0
175	P/F Concealed Flush Tank	Providing & fixing concealed flush tank Hindware make concealo 80 mm (508179) or Parryware Linea 80 mm C8114	2.5	EA		0
176	P/F Health Faucet	Providing & fixing health facuet of Hindware make flora series cat no. F160023 or Jaquar make allied series ALD 573	5	EA		0
177	P/F Jet Spray	Providing & fixing JET SPRAY of 12 mm dia and fixing it on WC seat	5	EA		0
178	P/F EWC Seat Cover	Providing & fixing Hindware make white color EWC seat cover as per required size	2.5	EA		0
179	P/F S.S. Sink	Providing & fixing Nirali make SS sink elegance popular series	2.5	EA		0
180	Prov. & Fix CP Floor Trap - 100 mm	Providing & fixing CP floor trap 100 mm dia with interlocking plate mounted on floor	5	EA		0
181	Prov & Fix PVC Nahani Trap - 100 mm	Providing & fixing PVC nahani trap 4 inch,	5	EA		0
182	P/F Nahani Trap 3	Providing & fixing 100 mm dia 3 way PVC nahani trap	5	EA		0
183	P/F Nahani Trap 4	Providing & fixing 100 mm dia 4 way PVC nahani trap	5	EA		0
184	P/F Bib Cock	Providing & fixing CP concealed bib cock Hindware made F 280002 or Jaquar make FLR 5041 along with its flange cap	5	EA		0
185	P/F Stop Cock	Providing & fixing CP concealed stop cock Hindware made F 280004	5	EA		0
186	P/F Angle Cock	Providing & fixing Angle cock Jaquar make FLR CHR	5	EA		0
187	P/F 2 Way Bib Cock	Providing & fixing 2 way bib cock Jaquar make FLR 5041 n or Hindware make F280003	5	EA		0
188	P/F Pillar Cock	Providing & fixing Hindware make pillar cock f280001 or Jaquar make FLR 5015	5	EA		0

189	P/F Pillar Cock Tall	Providing & fixing tall pillar cock Jaquar / Hindware make as per approved AOC palette (Jaquar make F460002CP / Hindware make F400005CP)	5	EA		0
190	P/F Sink Cock	Providing & fixing CP sink cock Jaquar make FLR 5009b or Hindware make f280026	5	EA		0
191	P/F Flush Valve 32mm	Providing & fixing flush valve 32 mm flow size Jaquar make FLV 1085 sq with concealed body & cover plate	5	EA		0
192	P/F Flush Valve 40mm	Providing & fixing flush valve 40 mm flow size Jaquar make FLV 1089 sq with concealed body & cover plate	5	EA		0
193	P/F Urinal Flush Valve	Providing & fixing Urinal flush valve PRS - CHR - 073 including cover plate	5	EA		0
194	P/F CP Bottle Trap,31mm	Providing & fixing 31 mm bottle trap of Jaquar make allied series ALD 769 or Hindware make flora series f850015	5	EA		0
195	P/F Overhead Shower With Mixer	Providing fixing overhead shower, code: cat. No. Ohs 1709 round shape single flow with air effect abs body & face plate chrome plated rubit cleaning system, single lever shower mixer code: FLR CHR 5123, shower arm: code: sha 479l300 round shape with 90º bend for wall mounted showers with flange	2.5	EA		0
196	P/F Bath Tub Spout	Providing & fixing Jaquar make bath tub spout SPJ 15429, rate shall be inclusive of concealed body, man, material tools, transportation required to carry out the job so as to fir for use"	2.5	EA		0
197	P/F Diverter in Washroom	Providing & fixing single liver concealed diverter body Jaquar make ALD - 055, with exposed part kit FON - 40055K	2.5	EA		0
198	P/F ovrhead Shower	PROVIDING AND FIXING OF CHROME PLATED SHOWER, DIAMETER: 100 MM of Jaquar- Code-OHS 1709 WITH LONG ARM code SHA-479 L450	5	EA		0
199	P/F Waste Coupling	Providing & fixing waste coupling Jaquar make 32 mm dia ALD - CHR - 705L130	7.5	EA		0
200	P/F Flexible Pipe	Providing & fixing flexible pipe 32 mm dia	7.5	EA		0
201	P/F Hose Pipe	Providing & fixing PVC hose pipe of 12 mm dia including connecting with plumbing fixtures	7.5	EA		0
202	P/F Foot Operated Tap	Providing & fixing Jaquar exposed foot operated valve PRS-STL-033EF	5	EA		0
203	P/F Double Coat Hook	Providing & fixing Double coat hook Jaquar make AKP-CHR-35761P	5	EA		0
204	P/F Grab Bar - 600 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1507 (600 mm long)	5	EA		0
205	P/F Grab Bar 450 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1503 (450 mm long)	5	EA		0
206	P/F Grab Bar 300 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1501 or AKP-CHR- 35701 (300 mm long)	5	EA		0
207	P/F Toilet Roll Holder	Providing & fixing toilet paper roll holder Jaquar make Kubix prime series (AKP 35753PS) or Continental series (ACN - 1153N)	5	EA		0
208	P/F Soap Dispenser	Providing & fixing Soap dispenser Shresmo make SHD - 12618	5	EA		0
209	P/F Tissue Paper Dispenser	Providing & fixing Tissue paper dispenser Euronics make EP23 or Opera make	5	EA		0
210	P/F Eye Washer System	SAFETY Eye Washer SHOWER - 6250 GI Udyogi Safety Shower & eyewash operates independently by pull rod, H& push lever & foot lever Shower: Extra-large drench shower head made of highly visible yellow ABS plastics Pipe: ISI marked GI pipe with powder coating for anti-corrosion Valve: SS stay open ball valve with yellow ABS push plate Bowl: Receptor bowl made of ABS & highly resistant to acid, Alkali & oil among others. Atomiser heads: Twin soft flow atomiser head which has	2.5	EA		0
211	Prov., Laying & Fix, UPVC 12mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 12 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0

212	Prov.,Laying&Fix,UPVC 19mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme dia 19mm	5	M		0
213	Prov.,Laying&Fix, UPVC 25mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 25 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
214	Prov.,Laying&Fix, UPVC 32mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 32 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
215	Prov.,Laying&Fix, UPVC 38mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 40 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
216	Prov.,Laying&Fix, UPVC 50mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends - 50 mm	5	M		0
217	Prov.& Replcng CPVC 12mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:12 mm	5	M		0
218	Prov.& Replcng CPVC 19mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:19 mm	5	M		0
219	Prov.& Replcng CPVC 25mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:25 mm	5	M		0
220	P/F Pipe, C Class, GI 12mm	Providing & fixing RST / Hindustan make c class GI pipe of 12 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
221	P/F Pipe, C Class, GI 19mm	Providing & fixing RST / Hindustan make c class GI pipe of 19 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
222	P/F Pipe, C Class, GI 25mm	Providing & fixing RST / Hindustan make c class GI pipe of 25 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
223	P/F Pipe, C Class, GI 32mm	Providing & fixing RST / Hindustan make c class GI pipe of 32 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
224	P/F Pipe, C Class, GI 38mm	Providing & fixing RST / Hindustan make c class GI pipe of 38 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
225	P/F Pipe, C Class, GI 50mm	Providing & fixing RST / Hindustan make c class GI pipe of 50 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
226	P/F Pipe, C Class, GI 65mm	Providing & fixing RST / Hindustan make c class GI pipe of 65 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
227	P/F SWR 75mm PVC Pipe Type A	Providing & fixing SWR 75 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
228	P/F SWR 90mm PVC Pipe Type A	Providing & fixing SWR 90 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
229	P/F SWR 110mm PVC Pipe Type A	Providing & fixing SWR 110 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
230	P/F SWR 160mm PVC Pipe Type A	Providing & fixing SWR 160 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0

231	P/F SWR 75mm PVC Pipe Type B	Providing & fixing SWR 75 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
232	P/F SWR 90mm PVC Pipe Type B	Providing & fixing SWR 90 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
233	P/F SWR 110mm PVC Pipe Type B	Providing & fixing SWR 110 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
234	P/F SWR 160mm PVC Pipe Type B	Providing & fixing SWR 160 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
235	Prov./Laying Salt Glazed Pipe 100mm	Providing & laying salt glazed pipe of 100 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	5	M		0
236	Prov./Laying Salt Glazed Pipe 150mm	Providing & laying salt glazed pipe of 150 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	5	M		0
237	Prov./Laying Salt Glazed Pipe 200mm	Providing & laying salt glazed pipe of 200 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	5	M		0
238	Prov.&Laying Hume Pipe,150mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 150 mm dia.	5	M		0
239	Prov.&Laying Hume Pipe,200mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 200 mm dia.	5	M		0
240	Prov.&Laying Hume Pipe,300mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 300 mm dia.	5	M		0
241	Prov.&Laying Hume Pipe,450mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 450 mm dia.	5	M		0
242	Laying of HDPE Pipe Of Any Dia	Providing Services for laying of HDPE pipe of any dia, rate shall be inclusive of man, shifting of material from local Tata Power stores to the site, cutting, laying and disposing wastage at Tata Power scrap yard, rate will be exclusive of necessary excavation or allied work	5	M		0
243	Prov.,Cutting&Fix,Pipe,HDPE,140mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 140 mm	5	M		0
244	Prov.,Cutting&Fix,Pipe,HDPE,200mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 200 mm	5	M		0
245	P/F,Gate valve,12mm ISI Marked	Providing and fixing of gate valve, diameter: 12 mm, ISI make or make: ganga	5	EA		0

246	P/F,Gate valve,19mm ISI Marked	Providing and fixing of gate valve, diameter: 19 mm, ISI make or make: ganga	5	EA		0
247	P/F,Gate valve,25mm ISI Marked	Providing and fixing of gate valve, diameter: 25 mm, ISI make or make: ganga	5	EA		0
248	P/F,Gate valve,39mm ISI Marked	Providing and fixing of gate valve, diameter: 39 mm, ISI make or make: ganga	5	EA		0
249	P/F,Gate valve,50mm ISI Marked	Providing and fixing of gate valve, diameter: 50 mm, ISI make or make: ganga	5	EA		0
250	P/F Water meter 3 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 3 inch dia pipe	1.5	EA		0
251	P/F Water meter 4 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 4 inch dia pipe	0.5	EA		0
252	P/F Foot Valve - 1 Inch	Providing & fixing Fixing brass foot valve of 1 inch foot valve along with necessary accessories	7.5	EA		0
253	P/F Foot Valve -1.5 Inch	Providing & fixing Fixing brass foot valve of 1.5 inch foot valve along with necessary accessories	7.5	EA		0
254	P/F Foot Valve - 2 Inch	Providing & fixing Fixing brass foot valve of 2 inch foot valve along with necessary accessories	7.5	EA		0
255	P/F Foot Valve - 2.5 Inch	Providing & fixing Fixing brass foot valve of 2.5 inch foot valve along with necessary accessories	7.5	EA		0
256	P/F Foot Valve - 3 Inch	Providing & fixing Fixing brass foot valve of 3 inch foot valve along with necessary accessories	7.5	EA		0
257	P/F Pressmatic Tap	Providing & fixing Jaquar make PRS - CHR - 031 pressmatic tap	7.5	EA		0
258	P/F brass Rod Ball Cock,12mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 12 mm, first quality and of ISI approved make	5	EA		0
259	P/F brass Rod Ball Cock,19mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 19 mm, first quality and of ISI approved make	5	EA		0
260	P/F brass Rod Ball Cock,25mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 25 mm, first quality and of ISI approved make	5	EA		0
261	P/F brass Rod Ball Cock,50mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 50 mm, first quality and of ISI approved make	5	EA		0
262	P/F 500 Ltr PVC Tank	Providing & connecting 500 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	2	EA		0
263	P/F 1000 L PVC Tank	Providing & connecting 1000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	2	EA		0
264	P/F 2000 L PVC Tank	Providing & connecting 2000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	2	EA		0
265	P/F 5000 L PVC Tank	Providing & connecting 5000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	4	EA		0
266	Providing Plumbing Services	Providing Services for misc plumbing works, rate shall be inclusive of manpower of 1 plumber & helper	7.5	EA		0
267	Prov. Plumbing Material for repairs	Providing Necessary material for plumbing work as approved by EIC, Payment will be made against submitted original invoice / challan of material, including 15% vendor's profit	7.5	EA		0
268	Replacement of Sensor Tap-Washbasin	Providing & fixing sensor tap Hindware make F240001CP or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, removal of existing tap and installation of new tap	7.5	EA		0
269	Replacement of Sensor Batteries	Removing and replacing of sensor batteries, plumbing services including all required tools, tackles, materials, and fixtures, including loading, unloading and transportation up to site for laying etc. complete as directed for following items	7.5	EA		0
270	P/F FRP Grating - 38 X 38 X 38	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (7 - 5 mm), height 38 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	5	M2		0
271	P/F FRP Grating - 38 X 38 X 25	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (6 - 5 mm), height 25 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	5	M2		0

272	P/F FRP Grating - 50 X 50 X 12	P/F FRP molded grating of mesh size 50 X 50 mm with rib thickness (8 - 5 mm), height 12 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	5	M2		0
273	P/F FRP pultruded grating 50 mm thk	Supplying and installation of FRP cover grating code CT40-200 with frame of 50x50x5mm angle and 3mm top chequered plate load bearing capacity of 2200kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin. Colour #	5	M2		0
274	P/F FRP pultruded grating 75 mm thk	Supplying and installation of FRP cover grating 75 mm thick light weight code ct25-200 (25 mm thick grating) plus frame of 50x50x5mm box pipe, and 3mm top chequered plate load bearing capacity of 400kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin. Colour # yellow.	5	M2		0
275	P/F FRP manhole cover (900 mm dia)	Prov. & fixing 900 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
276	P/F FRP manhole cover (750 mm dia)	Prov. & fixing 750 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
277	P/F FRP manhole cover (600 mm dia)	Prov. & fixing 600 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
278	P/F FRP manhole cover (300 X 300)	Prov. & fixing 300 X 300 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
279	P/F FRP manhole cover (450 X 450)	Prov. & fixing 450 X 450 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
280	P/F FRP manhole cover (450 X 600)	Prov. & fixing 450 X 600 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
281	P/F FRP manhole cover (450 X 900)	Prov. & fixing 450 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
282	P/F FRP manhole cover (600 X 900)	Prov. & fixing 600 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
283	FRP storm water drain cover 300X300	Prov. & fixing 300 X 300 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
284	FRP storm water drain cover 450X450	Prov. & fixing 450 X 450 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
285	FRP storm water drain cover 450X600	Prov. & fixing 450 X 600 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
286	FRP storm water drain cover 450X900	Prov. & fixing 450 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
287	FRP storm water drain cover 600X900	Prov. & fixing 600 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
288	P/F FRP fencing	Supplying & Installation of FRP Fencing to sub station of height 2.4 M, with FRP Vertical pipe 50x50x5mm, & FRP Angle of 50x50x5mm, & FRP Grill of square 38mmx38x10mm, thickness 6 mm. The grill are fitted in the Angle frame, which will be fixed on Vertical pole with Foot pad 150x150x130mm, using Anchor Fastener of 16 mm HILTI Made as per given dawing. incl. gate made with same framing, SS Hinge & aldrop. Material to be used will be as per IS 6746 ISOPTHALIC POLYSTER	2.5	M		0
289	P/L FRP septic tank	P/I FRP septic tank, rate shall be inclusive of man, material, tools, transport, installation to the line & level and connecting it with sewage system	2.5	L		0
290	P/F FRP railing	Supplying, fabricating and erecting of approved shade FRP Pultruded handrail square pipe having size 50X50X6.35 mm thick consisting of double FRP rail with top rail & mid rail at 1000 mm & 500 mm respectively & Vertical pipe post of square pipe having size 50X50X6.35 mm thick erected at not more than 1500 mm c/c distance including its own connecting foot pad of size 150 x150 x130 mm fitted with SS 304 M12 -100 LG anchor bolt at bottom with all neceessary accessories and 100 X3 mm toe guard	5	M		0
291	P/F FRP perforated cable trays	Prov. FRP make perforated cable trays of size 450 mm including support	5	M		0

292	P/F FRP chajja	Prov. & fixing 3 mm thick FRP Chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site including scaffolding (up to 12 meter)	2.5	M2		0
293	P/F FRP chajja - excl. scaffolding	Prov. & fixing 3 mm thick FRP chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site, excluding scaffolding and manlifter	7.5	M2		0
294	P/F CMRCL flush door shtr,38mm	Providing Services & material for 38 mm thick commercial flush board shutter with 1 mm thick laminate of Century / Greenlam / Kitply of required shade, 6 mm thick 2 year seasoned teakwood lipping, making any cutout for glass including fixing of glass with beading, 3 nos. 4 inches railway type hinges, 110 mm CP handle, CP aldrop, door stopper on each shutter, sneak hole with glass, painting of lipping by 2 coats of	5	M2		0
295	P/F kitchen under counter shutter	Providing Material & fixing under counter kitchen cabinet with frame & shutter, rate shall be inclusive of 1 inch thick frame, 18 mm Greenply made plywood shutter with 1 mm century laminate Natural Oak 3397 & white sun mica internal side, 6 mm lipping of all four side, chrome plated handle, magnet lock, SS hinges, two coat paint of synthetic enamel paint of approved shade	5	M2		0
296	P/F fire rated door with panic bar	Providing , fixing, loading unloading , single Leaf 2 hrs fire resistant door with 44 mm shutter thickness, in fill honey comb core, doors shutter made of GI sheet of 0.9 mm thick and frame made of GI sheet of 1.3 mm thick with single rebate frame of 100 * 75 mm . Powder coated frame & shuter with 50-60 micron, including 6 mm thick fore rated galss panel for clear vision 200 * 300 mm, SS 304 fire rated ball bearing hinges , with panic bar single point, external trim, door closer &	2.5	M2		0
297	P/F Al anodised,window,2 track	Providing, erecting and fixing of aluminum anodized sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class B section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per IS code or as directed	7.5	M2		0
298	P/F Al anodised,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
299	P/F Al anodised,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
300	P/F Al powder coated,window,2 track	Providing, erecting and fixing of aluminum powder coated sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class b section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0

301	P/F Al powder coated,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal make class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
302	P/F Al powder coated,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal make b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
303	P/F domal section windows (2 track)	Providing & fixing 2 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or	7.5	M2		0
304	P/F domal section windows (3 track)	Providing & fixing 3 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or	7.5	M2		0
305	P/F UPVC windows	Providing & fixing factory made white UN-Plasticized poly Vinyl chloride (UPVC) windows(FENESTA or Equivalent as approved by site in charge) at all levels made out ofextruded three chambered profile frame with hermetically sealed double glazed glass customized in 56mm wide system ,all fittings and fixing at site andsealing the gaps etc. as per the designed and as directed by site in charge.	7.5	M2		0
306	P/F Al powder coated fixed windows	Providing & fixing Al powder coated fixed window using 63 X 38 X 14 gauge powder coated Al section with powder coating min. 50 micron on exposed surface, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	5	M2		0
307	P/F Al anodized fixed windows	Providing & fixing Al anodized window using 63 X 38 X 14 gauge powder coated Al section with buffing of all sections, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	5	M2		0
308	P/F Anodized Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal make anodized and buffed as per required shade, with Z section for installation of 100 mm wide blur / frosted annealed glass	5	M2		0
309	P/F powder coated Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal , with Z section for installation of 100 mm wide blur / frosted annealed	5	M2		0
310	P/F Anodized Al partition	Providing & fixing Al anodized partition made of 63 X 38 mm 14 gauge Jindal make sections, with buffing of all surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	5	M2		0
311	P/F Al powder coated partition	Providing & fixing Al powder coated partition made of 63 X 38 mm 14 gauge Jindal make sections, with min 50 micron powder coating at exposed surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	5	M2		0
312	P/F Aluminum anodized door	Providing & fixing partly glazed partly panelled Al anodizing door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top	5	M2		0

313	P/F Aluminum powder coated door	Providing & fixing partly glazed partly panelled Al powder coated door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top, minimum 50 micron powder coating	5	M2		0
314	P/F Aluminum framed backelite door	Providing & fixing backelite door made of 16 gauge X 25 X 65 mm Al powder coated frame with 3 mm thick backelite sheet along with 4 inch tower bolt, 3 nos. hinges, installation	5	M2		0
315	P/F Al grill (2 x 2 inch)	Providing & fixing Al Grill - mesh opening 50 mm X 50 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	5	M2		0
316	P/F AL grill (3 x 3 inch)	Providing & fixing Al Grill - mesh opening 75 mm X 75 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	5	M2		0
317	P/F Door closer	Providing & fixing HYPER / GODREJ (9420) / ENOX / DORMA (TS 71) MAKE DOOR CLOSER	5	EA		0
318	P/F concealed door closer	Providing & fixing concealed door closer Godrej / Dorma / Enox make as per approved AOC palatte	5	EA		0
319	P/F door floor spring	Providing & fixing Floor spring including making cut out in floor and fixing of spring, rate shall be inclusive of man, material, installation so as to complete the job. (Product - Dorma make BTS 75V / Godrej make 9424)	5	EA		0
320	P/F PVC beading of windows	Providing & replacing beading of sliding windows with PVC beading, rate shall be inclusive of man, material, opening of window shutter and replacing beading, refixing	5	M		0
321	P/replacing friction stay hinges	Providing & replacing SS 430 / SS 201 friction stay hinge of openable window of 10 inch for max width 1200 mm, , rate shall be inclusive of manpower, material, removal of window, replacement of hinge and reinstallation of window	5	EA		0
322	P/F cp tower bolt 6	Providing & fixing 6 inch CP tower bolt	5	EA		0
323	P/F CP tower bolt 8	Providing & fixing 8 inch CP tower bolt	5	EA		0
324	P/F aldrop	Providing & fixing 12 inch CP aldrop	5	EA		0
325	Prov. & replacing SS wire mesh 24G	Providing & replacing ss mosquito mesh of existing sliding windows shutters at all heights including removing damaged mesh, providing new ss mosquito mesh 24 gauge 16 mesh and fixing it in window as earlier of matching shape and design with nails / screw complete with finishing as directed by TPC engineer.	5	M2		0
326	P/F cylindrical lock	Providing & fixing cylindrical lock Godrej / Enox / Hafele / equivalent make as per AOC palette	5	EA		0
327	P/F mortise lock (office door)	Providing and fixing brass mortise latch & lock 100mm X 65mm with 6 levers & a pair of brass lever handle(for main door).	5	EA		0
328	P/F 12 mm thk toughened glass door	Providing & fixing 12 mm thick toughened glass door cut to the required size with Godrej make Patch fittings for top, bottom pivot and side patches, rate shall be inclusive of man, material, transportation and installation at site	2.5	M2		0
329	P/F toughen glass door lock - door	Providing & fixing toughen glass door lock (Godrej make - prod code 7780)	2.5	EA		0
330	P/F toughen glass door lock - floor	Providing & fixing Bottom lock in glass door Godrej make Bottom lock patch 7759 or Godrej make Side lock patch 7764.	2.5	EA		0
331	P/F door stopper	Providing & fixing chrome plated door stopper	5	EA		0
332	P/F door buffer	Providing & fixing 100 mm long door buffer made of	5	EA		0
333	P/A of sun film	Providing & applying Garvare make sun control film of required shade, Garware make high heat rejection film HHR 25	12.5	M2		0
334	P/F white board film	Providing & fixing Garware make White Board film of PTE film thickness 150 micron	5	M2		0

335	P/F partition cubicle for washroom	Providing & fixing Modular cubical in 12mm compact laminate of approved color and texture with ss hardware comprising of door shutter, wall fixing rose, head, rail, wall bracket, tubular holder, corner connector, coat hook cum door stopper, lock cum occupancy indicator, hinge, door knob, adjustable foot and all other necessary accessories required to complete the job in all respect. Make - matrix, Greenlam	5	EA		0
336	P/F urinal partition	Providing & fixing urinal partition: providing and fixing of urinal composite partition of approved colour and make including all tools and tackles fixing at site in line and level etc complete as directed.	7.5	EA		0
337	P/F mirror - 600 x 450	Providing & fixing mirror of size 600 X 450 along with bracket / studs	2.5	EA		0
338	P/F mirror - circular	Providing & fixing Mirror of 550 mm dia along with brakcet / studs	2.5	EA		0
339	P/F toughen glass 12 mm	Providing & fixing 12 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gauge Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	5	M2		0
340	P/F toughen glass 8 mm	Providing & fixing 8 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gague Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	5	M2		0
341	P/F H handle for glass door(450 mm)	Providing & fixing of Godrej make H tyep HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (length - 450	5	EA		0
342	P/F H handle for glass door(600 mm)	Providing & fixing of Godrej make H type HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (lentgh 600	5	EA		0
343	P/F cabin door handle	Providing & fixing of Godrej make NEH 03 handles	5	EA		0
344	Silicon sealant - stone to al	Providing & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to granite / marble stone	5	M		0
345	Silicon sealant - masonry to al	Poviding & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to cement plaster surface	5	M		0
346	Silicon sealant - glass to glass	Providing & applying clear silicone sealant of Dow / Dr. Fixit silicon sealant suitable for glass	5	M		0
347	P/F gypsum board false ceiling	Providing & fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing and fixing of framework as spelled out in approved manufacturer catalogue. Bidder to provide adequate steel sections & hanger supports, including making openings for ac grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick.Vertical / inclined face shall be measured above	25	M2		0
348	P/F tegular grid ceiling	providing & fixing tegular grid ceiling system, at all heights including providing and fixing of framework in silhouette system sections as spelled out in Armstrong or equivalent manufacturer catalogue. Ceiling tiles shall be of size 600 mm x 600 mm of approved color. Incl. adequate steel sections (channel, main runner, cross runner in silhouette section) and hanger / GI wire supports to cater to the false ceiling loads. Approved make: Armstrong or equivalent	25	M2		0
349	P/F gypsum board false ceiling-Band	Providing all materials and fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing & fixing of framework as spelled out in Saint Gobain or equivalent. Incl. adequate steel sections (channels, L or T sections) and hanger supports to cater to the ceiling loads. Incl. making openings for AC grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick. (For width below 200	50	M		0
350	P/F gypsum board	Providing all materials and fixing monolithic gypsum board conforming to IS 2095, at all heights on existing supports. Vertical / inclined face shall be measured above 200 mm high only. For payment purpose false ceiling shall be measured in plan only.	22.5	M2		0
351	P/F 3 mm thick backelite sheet	Providing all materials and fixing 3 mm thick backelite sheet, at all heights on existing supports. For payment purpose false ceiling shall be measured in plan only.	22.5	M2		0

352	P/F PVC false ceiling	Providing & fixing PVC ceiling planks 7 to 10 mm thick, including providing and fixing of framework as spelled out in manufacturer catalogue. Quote shall include sealing off the ends, capping, all support systems, edges framing etc.	22.5	M2		0
353	P/F false ceiling - open cell # WR	Providing & fixing of open cell cellio metal false ceiling system at all heights including providing and fixing of framework as spelled out in Armstrong or equivalent, size 600 mm x 600 mm. including providing adequate steel sections (channels, i or t sections) and hanger supports to cater to the false ceiling loads. Owner would check the design and adequacy and has the right to reject if found inadequate. Job to be complete in all	7.5	M2		0
354	P/F perforated false ceiling	Prov & fixing of Infratop false ceiling with hidden/visible perforations, of panel sizes of 340mmx 2700mm, resistant to moisture, borer-fungus-termite attack. Panels to be installed with GI / Aluminum sections of suitable gauge & size according to site conditions. Panels SV 08/07 &09 with suitable trims SV 15 with dimensions 40x19x22x12x3050 mm for edge profiles & SV 18 with dimensions 67x3050 mm with T head of 42mm for connecting profiles. 10 years warranty for colour & finish of the panels	12.5	M2		0
355	Fixing existing false ceiling	Providing Services for fixing of available false ceiling panel by laying new mesh of silhouette section supports, rate shall be inclusive of man, material, tools & tackles, transportation	12.5	M2		0
356	P/F Antistatic false flooring-300mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-for	12.5	M2		0
357	P/F Antistatic false flooring-450mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-for	12.5	M2		0
358	P/F Antistatic false flooring-600mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-for	12.5	M2		0
359	Installing existing false flooring	Providing Services for installation of existing false flooring panels, rate shall be inclusive of manpower, flooring support of 450 mm, laying & fixing supports to the line and level, cutting of flooring panels as per site requirement and installation	12.5	M2		0
360	P/F ACP cladding	Supplying and fixing aluminum composite panel of approved make and colour for exterior application. The 4 mm thick panels of 3mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with self-adhesive peel off masking foil with PVDF base coating on top side and rear side would be in mill finish. As per the specification duly fabricated on imported holzer machines and fixed to extruded aluminum sections	12.5	M2		0
361	P/ F ACP cladding (firewall a2)	Providing & fixing Aludecor make firewall a2 ACP sheets or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, al support structure using 25 x 25 mm square pipe, cutting of sheet, wastage and disposing of debris outside tata power premises	7.5	M2		0
362	P/F ACP cladding (excl. support)	Providing & fixing ACP sheet of approved make & colour for exterior application. The 4 mm thick panels of 3 mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with PVDF base coating on top side & rear side would be in mill finish. fixed to existing support framing	25	M2		0

363	Removing of blinds	Providing Services for removal of vertical / roller blinds and disposal it scrap yard or designated place as instructed by EIC	25	M2		0
364	Fixing of available blinds	Providing Services for fixing of existing available roller blind / vertical blinds, rate shall be inclusive of manpower, necessary screws or minor fixtures to complete the job	7.5	M2		0
365	P/F vertical blinds	Providing and fixing of vertical blind for window. Providing Aluminum channel with 100mm fabric size with operating unit .etc providing all equipment, material, tools, tackles etc for fixing blinds of approved make and shade etc complete as directed by site in	7.5	M2		0
366	Serv. for repair of vertical blinds	Providing services for repairing chain / holder etc for vertical blind.	7.5	M2		0
367	P/F roller blind	Providing and fixing of roller blind for window, providing, translucent fabric, with Aluminum frame and control unit along with the material, tools, tackles etc for fixing blinds for windows of approved make and shade by tata power etc complete as directed (product - platina make 01a bamboo or 01a alfa)	7.5	M2		0
368	Prov services of carpenter (1+1)	Providing carpentry services for one shift, rate shall be inclusive of one carpenter & one helper	7.5	EA		0
369	Prov Material for carpentry repairs	Providing Material for minor carpentry works, payment will be made against submitted bills and challans of material, incl. 15% profit for vendor	7.5	EA		0
370	Chair repair - handle (godrej)	Providing & replacing handle of chair for Godrej make leoma	2.5	EA		0
371	Chair repair - handle (stellar)	Providing & replacing handle of chair for stellar make Rev CH 16	2.5	EA		0
372	Chair repairs - wheel	Providing & replacing wheel of chair of Godrej / stellar make chairs	2.5	EA		0
373	Repl. Hyd. Cylinder chair (godrej)	Providing & replacing hydraulic cylinder of chair (for Godrej make leoma) along with handle	2.5	EA		0
374	Repl. Hyd. Cylinder chair (stellar)	Providing & replacing hydraulic cylinder of chair (for stellar make Rev CH 16) along with handle	2.5	EA		0
375	Prov. & replacing laminate 1 mm	Providing & replacing laminate of wooden door or shelf, rate shall be inclusive of removal of existing laminate by heating, grinding the surface to the smoothest possible, applying adhesive and pressing 1 mm thick laminate of approved shade and make over cleaned surface, rate shall be inclusive of man, material, transportation, wastage and disposal of debris, removing & refixing of door	2.5	M2		0
376	Removal and refixing of door	Removing and refixing of wooden door (size height: 80-inches (6-feet, 8-inches) thickness: 1 ¾-inches. Width: 36-inches, providing all tools tackles material for removing and refixing the wooden door completed as	2.5	M2		0
377	Marking & Painting of Strips 100mm	Marking and painting of strip, width: 100 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect alignment	12.5	M		0
378	Marking & Painting of Strips 75 Mm	Marking and painting of strip, width: 75 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect alignment	12.5	M		0
379	Marking & Painting of Strips 50 Mm	Marking and painting of strip, width: 50 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect alignment	12.5	M		0

380	Providing & Carrying Out White Wash	Providing & carrying out Whitewash by cleaning the surface by using brush, making it free from any loose or foreign material, dirt, oil, grease etc., preparing white wash water with mixing 1kg class D lime with 6 litres of water, leaving it for 2 days for uniform thin cream, mixing glue 100 gm per 6l of whitewash water, then applying it in two coats to achieve uniformity in white	12.5	M2		0
381	P/A 2 Coats of Lime Geeru Upto 3 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime.	7.5	EA		0
382	P/A 2 Coats of Lime Geeru 3 to 6 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth 3 feet to 6 feet.	7.5	EA		0
383	P/A 2 Coats of Lime Geeru above 6Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth above 6 feet.	7.5	EA		0
384	P/A Synthetic Enamel Paint	Providing and applying two coats of synthetic enamel paint of approved make over one coat of primer on structural steel including scaffolding at all height, providing all material for process	7.5	M2		0
385	P/A Acrylic Emulsion Interior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including filling up the crevices, cracks & holes with approved quality of painter#s putty and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (internal quality) of first quality and of approved manufacturers and approved shades.	37.5	M2		0
386	P/A Duco Paint	Prov. & applying duco paint as per following process:- 1) Filling dents and uneveness using wood filler putty and sanding it 180 no. sand paper 2) Applying 1st coat of primer with thinner (1 thinner : 1.5 primer) 3) sanding the surface again and fill the dents using wood filler putty 4) Apply one coat of primer on repaired surface and sand the surface with 220 & 320 no. sand paper 5) Apply 2 coat of duco paint (Duco NC lacquer 1 part: Duco thinner 2 part).	12.5	M2		0
387	P/A Acrylic Emulsion-1 coat interna	Supplying providing and applying to wall with water base acrylic emulsion paint of approved manufacture and of approved colour and shade including scaffolding etc complete as directed by EIC and application as per manufacturer's recommendation, including scaffolding ,cleaning surface etc. Acrylic emulsion paint 1 coat	37.5	M2		0
388	P/A Acrylic Emulsion Exterior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including opening up of crevices, cracks & holes and making v grooves, and filling up with approved quality of crack filler and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (external quality) of first quality and of approved manufacturers and approved shades.	25	M2		0
389	P/A Leafy Aluminum Paint	Providing all necessary tools ,tackles ,preparing the surface by scraping, chipping to remove loose rust, paint, detrimental foreign matter etc. Providing and applying one coat of high build zinc phosphate primer 35 microns DFT. Applying two finish coats of leafy aluminum paint (IS 2339) of 30 microns DFT of each coat complete as directed by EIC at all heights. total thickness of DFT shall not be less than 95 microns	12.5	M2		0

390	P/A Birla White Putty	P/A Birla white putty, Mix Birla white wall care putty with clean water slowly to make paste. Continue the mixing for 10-15 minutes till a uniform paste is formed. Apply the first coat on already moistened wall surface. After drying of first coat of putty just rub the surface gently with west sponge or rub the surface very gently with the putty blade in order to remove the loose particles. Allow the surface to dry for at least 3 hours and then apply second coat.	12.5	M2		0
391	P/A POP Punning	Providing and applying of 4 to 8 mm thick lime pop punning over all types of plastered surfaces of walls ceiling beams columns etc. To bring surface in plumb line and level, including making surface smooth, providing required grooves on top of skirting etc. The cost shall include all labour, materials, scaffolding, protecting adjoining surface, cleaning etc complete.	12.5	M2		0
392	P/A High Build Epoxy Paint	Providing and applying one coat of surface tolerant epoxy primer at 50 microns DFT followed by two finishing coats of high-build coal tar epoxy in recommended DFTs (100 microns DFT per coat) for chequered plates / gratings. Total thickness of DFT shall not be less than 250 microns. Item includes preparing the surface by scraping, sand papering, cleaning, solvent cleaning wherever required to remove oil/grease & painting with two coats of high-build coal tar epoxy in	12.5	M2		0
393	P/A Varnishing	Preparing the surfaces of wood by removing the existing stains, dirt, etc. By sand papering, filling cracks, depressions etc. with approved quality of putty or wax wherever required and as recommended by TPCL engineer and applying coats of French polish.	12.5	M2		0
394	P/A Melamyne Polish	P/A melamyne Polish (Make asian paint or equivalent approved by Tata Power) on wooden surface including all tools ,tackles ,plant, equipment (i) Scrubbing with sand paper (ii) Applying lac polish/spirit and lak dana solution (iii) filling small holes/cracks/scratches making surface even with putty/whiting mix with desired raw/burnt/burnt turkey amber sienna and lac polish (iv) Apply sand paper again on applied putty/whiting for finishing surface (v) Apply 2 coats of polish with buffing	12.5	M2		0
395	P/A PU Polish	Providing all necessary tools tackles services etc. For removing & providing high quality PU polish on door as directed by site engineer. Shade and color of the polish shall be same as previous shade & color.	12.5	M2		0
396	P/A Luminous Paint	Prov. & applying luminous paint of required shade, rate shall be inclusive of scrapping of surface to make it free from dirt, oil and algae, applying one coat of water based primer and two coats of luminous paint	12.5	M2		0
397	Services for Wild Growth Cutting	Providing Services for removal of grass / shrubs (of size up to 3 feet height) by uprooting them or cutting them from base, rate shall be inclusive of man, tools, disposal of wild growth outside tata power premises	62.5	M2		0
398	Services for Weedicide Spraying	Providing & spraying weedicide at switchyards in power house, rate shall be inclusive of material, spraying tools, manpower so as to complete the job. Vendor should submit MSDS of weedicide prior to use on site.	62.5	M2		0
399	Service for Cleaning of Moss	Providing Services for moss removal by spraying bleaching powder over the area, leaving it for 30 minutes and spray water over it	62.5	M2		0
400	Service for Housekeeping	Providing Services for material shifting & cleaning of operational areas as instructed by EIC	100	M2		0
401	Prov.& Supply Red	Supplying natural red soil at site as directed by EIC	5	M3		0
402	Prov. & supply manure	Providing & supplying good cow dung manure, loading & unloading at site etc.	7.5	M3		0
403	Serv. clearing Sewage Line Chockup	Providing Services for completing / attempting choke up clearance in any sewage line by using traditional method of using 8 mm / 10 mm reinforcement bar, pouring in water with pressure as much as possible as instructed by EIC	12.5	M		0
404	Cleaning Septic Tank by suctiontank	Providing Services of municipal corporation suction tank & ite operating team	3	EA		0
405	Serv for Cleaning of Sewage Chamber	Providing Services for cleaning of sewage chamber of all sizes by removing its muck and disposing it away from residential area outside tata power premises	7.5	EA		0

406	Serv for Gravel & Boulders Removal	Providing Services for removal of gravel & boulders filled in transformer foundation or in switch yard ground and shifting within 100 meter lead inside tata power premises	7.5	M3		0
407	Serv for Laying available Gravel	Providing Services & material for laying gravels (50 - 60 mm) in transformer foundation with gravels & boulders (200 - 250 mm) available at site as instructed by EIC	7.5	M3		0
408	Prov. & Laying Gravel in Switchyard	Prov services & material gravel in switch yard of size 50 - 60 mm in layer maximum upto 300 mm depth, rate shall be inclusive of shifting material within 200 meter lead, levelling of surface	7.5	M3		0
409	Prov & Laying Sand Bags	Providing & laying river / sea sand bags (min weight 20 kg per bag), shifting & laying cable trenches	7.5	EA		0
410	Prov. & filling sand in trenches	Providing Services for river / sea sand filling in trenches and levelling, rate shall be inclusive of man, material, shifting of sand upto 100 m lead.	7.5	M3		0
411	Services for removal of Sand Bags	Providing Services of removal of sand bags and shifting it to designated place as instructed by EIC	7.5	EA		0
412	Services for Laying of Sand Bags	Providing Services for laying of existing sand bags, rate shall be inclusive of shifting of sand bags upto lead of 100 m	7.5	EA		0
413	Const. of earth pit 600 x 600	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 600mm x 600mm	7.5	EA		0
414	Const of earth pit 900 x 900	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 900mm x 900mm	7.5	EA		0
415	Const of earth pit 1200 x 1200	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 1200 mm x 1200mm	7.5	EA		0
416	Supplying Marconite rod 100 mm dia	Supplying 3 m long marconite rod by casting marconite compound around 20 mm dia copper rod, rate shall be inclusive of man, material, tools, transportation and installation at site, rod must be free from visible cracks	7.5	EA		0
417	Refurbishment of earth pit 600x600	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 600 mm x 600mm	7.5	EA		0
418	Refurbishment of earthpit 900 x 900	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 900 mm x 900mm	7.5	EA		0

419	Refurbishment of earthpit 1200x1200	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 1200 mm x 1200mm	7.5	EA		0
420	Brazing of Copper Conductor 0.2 mm	Providing all material, tools and tackles, service for brazing of 0.2 copper conductor	7.5	NO		0
421	Laying Copper Conductor 0.2mm	laying copper conductor,0.2mm, providing all tools & tackles for laying conductor in line as directed by EIC	7.5	M		0
422	P/A Acrylic waterproofing	Providing & applying Acrylic waterproofing coat over RCC roof including removing of existing waterpoofing treatment, removing damaged or loose portion of roof substrate, preparing surface free of dirt, oil etc., filling unlevelled surfaces with polymer modified mortar prepared by Dr. Fixit URP & filling surface cracks with Dr.Fixit Crack X, grouting of roof with non shrinkable polymeric grout, then applying primer coat of Dr. Fixit primeseal two coats of Dr. Fixit New coat with fibreglass mat	12.5	M2		0
423	Prov Brick bat coba waterproofing	Providing and laying brickbat coba in sunken portion of WCs, bathrooms, etc., consisting of one part of cement, 2 parts of broken brickbats varying from 12 mm to 25 mm thick and one part of lime mortar to two parts of sand as specified including preparing the surface by applying and grouting a slurry coat of neat cement using 2.75 kg/m2 of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface	12.5	M2		0
424	P/A APP / STP membrane	Providing and applying of Shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application followed by providing and applying of shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application. Top surface : providing and applying silver shield (bituminous aluminum coating) (With 5 year guarantee).	12.5	M2		0
425	Prov china mosiac waterproofing	Providing and laying intenral cement based water proofing treatment with China Mosaic finish including preparation of surface as required for treatment of roofs, balconies, terraces, RC gutters, etc. as per approved mehtodology	12.5	M2		0
426	P/A PVC membrane	Preparation & curing clean the surface & provide geotextile (minimum 300gsm). Provide PVC membrane (made of virgin PVC)alkor bright (minimum 1.5mm thick) over the surface &start placing from lowest point. Unroll the membrane half way align & fix themembrane 1st layer with the help of anchors & aluminium washers & adjacentlayer with hot air welding & applying unifrom pressure by roller/wet cloth toremove entrap air. Membranes to be fixed with aluminium strips at the end aboveparapet wall.	12.5	M2		0
427	Prov. Covering for windows	Providing, fixing & removing plywood (12mm to 20 mm thickness) covers of existing machine units/pump etc. (actual area of openings covered by plywood be measured.)	12.5	M2		0
428	Removal of loose concrete	Providing services for chipping of loose concrete from beams, columns, slabs & all other concrete surfaces to expose sound concrete beneath using light chisel & hammer & also preparing concrete surface to receive further treatment, disposing the debris as directed	12.5	M2		0
429	Removal of rust	Providing services for cleaning reinforcement of total rust by tapping or using wire brush or any other suitable way including from behind and around the reinforcement bars to give it a totally rust free finished steel surface. Measurement shall be on basis of repair surface area. Providing and applying approved chemical rust remover with paint brush and removing loose particles after 24 hours of its application. Measurement shall be on basis of repaired surface area	10	M2		0

430	corrosion inhibitor	Providing & applying corrosion inhibitor, the exposed reinforcing bars shall be cleaned thoroughly to remove corrosion scales using buffing wheel and emery cloth. The exposed surface shall be washed with water jet followed by applying two coats of anticorrosive chemical of approved brand on cleaned rebars as per manufacturers specification and directions of engineer-in-charge. (surface area of concrete treated will be measured for payment)	10	M2		0
431	Corrosion treatment	Corrosion Treatment :- Removing existing corrosion by means of mechanical wire brush on exposed surfaces of reinforcement, providing and applying Alkaline based Rust Converter RUST GUARD in single coat over the exposed rusted reinforcement as per the manufacturer specifications and instructions. Providing and Applying two coats of Zinc rich Primer on re-inforcement , STEEL GUARD at all heights etc complete.	10	M2		0
432	Treatment for separation cracks	Treatment For Separation Cracks :- Opening up the junction of brick work and beam / column, sealing the junction by metal packing/filling by polymer mortar, then overlaying the joints / crack by approved fibre sheet (strip) approx 200mm wide, applying bond coat of approved polymeric slurry before and after the fibre sheet is fixed over the joint (junction / crack) etc complete.	10	M		0
433	Crack filling	Providing material & treating cracks by filling , Cleaning the crack surface with the help of clean water, drying the surface in natural sun, providing & applying the bonding coat, providing & fixing fiber cloth 25mm to 50 mm width, filling the same with polymer putty, providing & applying 2 coats of acrylic polymer to that width of the surface cure natural for 24 hrs. etc.	10	M		0
434	Crack filling using polymer plaster	Carefully opening the cracks in plaster, cleaning the cracks with electrical air blower/water & filling the cracks with polymer modified cementitious mortar in proportion 1:5:15 (i.e. Polymer: cement: well graded quartz sand by wt.) including polymer bonding coat & seal coat, curing etc. complete. (Note: Width of cracks upto 6 mm and depth upto 20mm.)	10	M		0
435	PU sealant	Cleaning & filling the joints/gaps between the window with the help of PU Sealant of approved make etc complete in all respect from the both sides.	10	M		0
436	Epoxy bond coat	Providing and applying bond coat on the prepared surface to receive new polymer mortar/polymer modified concrete, with two components epoxy based bonding coat concresive 1414 of BASF/Nitobond ep of FISROC/ Fitbond EA of Conmix or equivalent material in one full coat. Laying of reinstatement polymer mortar or micro concrete shall be completed within the overlay time of bonding coat. Item rate inclusive of all man, material, transportation, tool etc.	10	M2		0
437	P/A Polymer plaster	Providing and applying of polymer modified mortar single component, alkaline resistant fibre reinforced, duel shrinkage-compensated, thixotropic, cementitious patch repair mortar as suitable material and finishing with trowel carefully compacting the same around the rebar's and finishing to bring it in line with existing concrete surface on the columns, beams & slabs etc., 25 mm thick polymer / latex modified mortar plaster	10	M2		0
438	P/L Micro concrete	Providing and laying of micro concrete, approved brand in proportion 1:1 with metal no.1 including mixing, waterproof shuttering, pouring, consolidating, scaffolding, curing as per MFG specifications, transportation at site, identification of leakage source, including dewatering of pits whenever required till completion of job etc complete as directed. (Measurement will be taken on consumption of micro concrete only, metal/aggregate will not be measured separately.)	10	KG		0

439	P/A prodecoat 0770	Providing and applying Prodecoat 0770 as per following methodology 1. Cleaning entire surface with high pressure water jet pump 2. Allow surface to dry 3. Open visible cracks in 5 mm * 5 mm width & depth. 4. Apply one coat of POLYSEAL-0724 in the opened cracks uniformly. 5. Allow it to dry for 4 Hours. 6. Fill the cracks with polymer sealant AQAUASEAL 7. Apply first coat of PRODECOAT- 0770 uniformly with brush or roller 8. Allow it dry for 60 minutes 9. Apply second coat of PRODECOAT-0770	10	M2		0
440	P/A Elastomeric paint	Providing & applying one coat of primer and two coats of elastomeric paint having an sel elangation upto 200 % applied to the surface at interval of not less than 6 hours to the approved shade and colour etc. complete. RAINGUARD .(,Providing & applying two coats of Elastomeric coating having 200-300% elongation over a coat of primer over properly prepared plaster surface including scrapping all loose material on existing plastered surface etc complete as directed.)	10	M2		0
441	FST 250	Providing & applying Expanded Foam (FST-Foam Duct Sealant 250) including Cartridge Set with Mixing Nozzle for any cable entry points gap filling work as directed by TATA power Engineer. The rate shall includes the cost of materials & associated equipments required for the job.	10	EA		0
442	Providing Service F/Hiring JCB	Hiring of JCB with fuel, operator and carrying out work as directed for 8 hours shift	2.5	SFT		0
443	Providing services of Crane 90 Ton	Providing service of 90 ton crane meeting all the requirement of tata power safety norm, rate should be quoted for 8 hr shift	1	SFT		0
444	Prov Services of Compressor Breaker	Prov. Services of compressor / tractor breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours shift	2.5	SFT		0
445	Prov. Services of JCB Breaker	Prov. Services of JCB breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours shift	2.5	SFT		0
446	Providing services of Ferrana	Providing service for hiring of Ferrana meeting all the requirement of Tata power safety norm, rate should be quoted for 8 hrs shift	5	SFT		0
447	Service for Hiring Tempo 10kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10 kms)	5	SFT		0
448	Service for Hiring Tempo 20kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20 kms)	5	SFT		0
449	Service for Hiring Tempo 30kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30 kms)	5	SFT		0
450	Services for Hiring Tempo 30-50 Kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50 kms)	5	SFT		0
451	Services for hiring Tata 407 10 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10 kms)	5	SFT		0
452	Services for hiring Tata 407 20 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20 kms)	5	SFT		0
453	Services for hiring Tata 407 30 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30 kms)	5	SFT		0

454	Serv. for hiring Tata 407 30-50 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50 kms)	5	SFT		0
455	Providing Concrete Pump	Prov. Services of concrete pump for grade up to M30 and distance up to 20 meter / height up to 10 meter	2.5	SFT		0
456	Providing 60 ft Manlifter(8 Hours)	Prov. Services of manlifter up to 60 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
457	Providing 60 ft Manlifter(4 Hours)	Prov. Services of manlifter up to 60 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
458	Providing 80 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 80 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
459	Providing 80 Ft Manlifter(4 Hours)	Prov. Services of manlifter up to 80 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
460	Providing 100 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 100 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
461	Providing 120 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 120 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
462	Providing 150 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 150 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
463	Prov. Diesel Operated Pump 2 HP	Prov. 2 HP submersible pump for dewatering of pits or other excavated space including diesel, transportation and operator service	2.5	SFT		0
464	P/F Scaffolding upto 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards upto 5 m height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of elevation	12.5	M2		0
465	P/F Scaffolding Above 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards from 5 m & above height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of	12.5	M2		0
466	P/F Scaffolding at all Height	Providing and fixing of tubular h-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, as per Tata power standards including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of elevation	12.5	M3		0
467	Water Supply - Potable	Supplying potable water by tanker, rate shall be inclusive of pumping water up to 8 m height as and	12.5	KL		0
468	Water Supply - Boring	Supplying potable water tanker to ground level or below storage tank	12.5	KL		0
469	MAK&CUT CORE IN RCC WALL/SLAB,250MM	MAK&CUT CORE IN RCC WALL/SLAB,250MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of 160-200 mm diameter.	50	No		0
470	MAK&CUT CORE IN RCC WALL/SLAB,150MM	MAK&CUT CORE IN RCC WALL/SLAB,150MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of upto 100 diameter.	50	No		0

471	WPC Board	WPC board, Providing and fixing of WPC board, providing all equipment, material, tools, tackles etc for replacing and fixing panneling at all height.as directed by engineer in charge and approved from architect	75	M2		0
472	providing and fixing of Artifical green	providing and fixing of Artifical green turf wall cladding panels of make Glo panels. Quote shall include require ply backing, adhesives, tool, tackels etc required to complet the job in all respect. It will be prefered if the material used is LEED or IGBC certified	100	M2		0
473	P/F awning	providing and fixing AWNING of fix type including all necessary supports and fixing at site, stable outdoor weather proof inclduing trasportationat site, fixing at height with fixrures and fastening etc complete as directed.	75	M2		0
474	CISE,P/F services for Awning cloth repla	Providing & replacing the existing Awning cloth with new approved make cloth. Vendor should submit catalogue and take approval from Site In charge before procurement of the cloth. Rate shall include all tools, tackles, transportation, scaffolding, etc. required to carry out the works as directed by Site In Charge.	100	M2		0
475	PRVDNG&FIXING,VINYL FLOORING	SERVICE TYPE: PROVIDING AND FIXING OF VINYL FLOORING, MATERIAL: POLY VINYL CHLORIDE OF APPROPRIATE BY MIN THICK: 2 MM OF APPROVED QUALITY AND SHADE INCLUDING LEVELLING, CLEANING OF FLOOR SURFACE, LEVELLING WITH POP IF REQUIRED AND FIXING WITH RUBBER ADHESIVE AS PER MANUFACTURE SPECIFICATIONS INCLUDING CLEANING OF THE SURFACE AND HANDING OVER TO TATA POWER CO, APPROVAL SHALL BE TAKEN FOR SHADE AND THICKNESS OF VINYL FLOORING, CUTOUTS/OPENING WILL BE DEDUCTED	100	M2		0
Sub-Total						**0**
GST @ 18%						**0**
Total (Including GST)						**0**
Sr. No	**Short Text**	**Description**	**Quantity for 1st year**	**UOM**	**1st Year**	
					Rate (INR)	**Amount(INR)**
B. Civil work at Operational area						
1	Excavation 0-1.5 m, disposal inside	Excavation in all types of ordinary soils including dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 0 to 1.5 mtrs deep within basic lead of 100 mtr (rate does not include payment against royalty and debris management cell charges)	20	M3		0
2	Excavation 0-1.5 m disposal outside	Excavation from 0 to 1.5 meter in all types of ordinary soils (natural / backfilled) including dewatering and depositing / stacking of all materials, removal of wild growth vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth material to authorized dumping sites outside owner#s	20	M3		0
3	Excavation 1.5-3 m, Disposal inside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials, removal of vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs and unloading the excavated material to authorized dumping sites inside owner#s premises.	12	M3		0

4	Excavation 1.5-3 m Disposal outside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs deep, rate shall be inclusive of dispoing surplus material to authorized dumping sites outside owner's premises.	12	M3		0
5	Collector permission for excavation	Obtaining collector permission for excavation for which tata power will provide the available documents. Official payment will be done by tata power on receipt demand note	25	M3		0
6	Excavn. in hard rock by JCB breaker	Prov. Services for excavation in hard rock using JCB breaker as directed by EIC and disposing debris outside tata power premises at authorized site outside owner's premises	12	M3		0
7	Prov. Cartage services	Providing cartage service & transporting, excavated soil, debris, bricks, concrete, dry garbage etc.and disposing off to municipal corporation area approved dumping sites outside premises incl submission of relevant documents. Note: measurement will be made on truck measurement.	25	M3		0
8	Backfilling with site material	Providing services for backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer with local earth available at site	25	M3		0
9	Supplying & filling with murrum	Supplying good quality murrum free from gravels & boulders, backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer, excluding use of JCB as per instruction of EIC	25	M3		0
10	P/L dry rubble soling	Providing and laying dry rubble soling of basalt stone or black trap stone or locally available strong stones with approved quality stones including filling gaps with small chips ramming with hand rammer etc. Complete.	25	M3		0
11	Rubble soling with site material	Laying of rubble soling with material available at site within 50 m lead, rate shall be inclusive of man, shifting of material manually, laying as per line & level, filling interstices with small chips and laying layer of crushed sand or good quality murrum	25	M3		0
12	Demolishing brick masonry	Providing all necessary tools tackles services etc for demolishing brick masonry of variable thickness with plaster and disposing off the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	12	M3		0
13	Breaking PCC	Providing all necessary tools tackles services etc for demolishing PCC and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer., rate shall be inclusive of storing debris up to 200 m lead until taken for disposal	12	M3		0
14	Breaking pointing	Providing all necessary tools tackles services etc for breaking pointing and disposing of the debris to the approved dumping ground of municipal corporation area / outside owner premises etc complete as per specifications and as directed by the engineer	12	M3		0
15	Demolishing RCC	Providing all necessary tools tackles services etc for demolishing all types of RCC structures at floor level manually or by means of chipper breaker (exclusive of air compressor breaker / JCB breaker / Poclain breaker) including transportation of debris, cutting of reinforcement, disposing salable scrap material to the tata power stores etc. Complete as per the requirement of drawing and as directed by the site-engineer and disposing of the debris to the outside company premises etc complete	12	M3		0
16	Breaking cement / lime plaster	Providing all necessary tool tackles services etc for breaking plaster of all thicknesses as directed by the site-engineer and disposing of the debris to the approved dumping ground of municipal corporation outside company premises etc complete as per specifications and as directed by the engineer	20	M2		0

17	Breaking of asphalt road (BC & DBM)	Providing all necessary tools tackles services etc for breaking asphalt road and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	20	M3		0
18	Breaking asphalt road incl. macadam	Providing all necessary tools tackles services etc for breaking asphalt road including macadam layer, soling etc. (all thickness) and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.,asphalt road including metalling, soling etc. (all thickness)	20	M3		0
19	Dismantling structural steel	Providing all necessary tools tackles & services for dismantling structural steel sections i.e. Angles / channels / beams / plates etc (not inclusive of ferrana / crane) & returning the same to nearest tata power stores or designated place etc complete as directed	10	MT		0
20	Removing Door / windows / louvers	Providing all necessary tools tackles services etc for removing all type of doors/windows in good condition & returning to the nearest tata power stores with necessary documentation etc. Complete as directed by the engineer	20	M2		0
21	Removing chainlink fencing	Providing services for removal of chain-link fencing including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever required.	125	M2		0
22	Removing Barbed wire	Providing services for removal of Barbed wire including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever required.	150	M		0
23	Removing concertina coil	Providing services for removal of concertina coil including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever required.	150	M		0
24	REMOVING OF AC/GI/FRP SHEET	Providing all necessary tools tackles & services for removing old AC / GI / FRP sheets from existing shed or boundary & returning to the tata power stores etc complete as directed	150	M2		0
25	Breaking of tile work	Providing all necessary tools tackles services etc for breaking of flooring & dado tiles as directed by the site-engineer and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.	37	M2		0
26	DISMANTLING PARTITION	Providing services for dismantling aluminum / wooden / annealed glass / toughen glass partition at all heights & depositing it to tata power stores or scrap yard as directed by engineer	37	M2		0
27	Dismantling Gypsum Partition	Providing services for dismantling gypsum board partition at all heights including support structure & depositing it to tata power stores or scrap yard as directed by engineer	37	M2		0
28	Removing False ceiling incl support	Providing services for dismantling grid type / gypsum false ceiling including supporting arrangement, depositing saleable scrap to tata power stores & disposing remaining debris outside tata power premises at own risk.	37	M2		0
29	Dismantling false ceiling	Providing services for dismantling of false ceiling (grid & board type) excluding supports and disposing it outside tata power premises	37.5	M2		0
30	Dismantling of false flooring	Providing services for dismantling of false flooring including supporting arrangement using required tools and tackles and shifting it to tata power scrap yard	25	M2		0

31	DISMANTLING CONCEALED PLUMBING LINE	Providing services for dismantling concealed plumbing line of any dia, by breaking tile / plaster as required, depositing wastage to stores or as directed by EIC / reusing it at site	20	M		0
32	Removing PVC pipe line	Providing services for wall mounted / concealed sewage / drainage line, disposing material outside Tata power premises at approved dumping ground	25	M		0
33	Removing EWC	Providing services for removing floor mounted / wall mounted EWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	5	EA		0
34	Removing IWC	Prov. Services for removing IWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	5	EA		0
35	Removing wash basin	Prov. Services for removing counter top / wall mounted wash basin of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	5	EA		0
36	Removing urinal	Prov. Services for removal of urinal and disposing it to outside tata power premises	7.5	EA		0
37	Removal of roller / vertical blinds	Prov. Services for removal of roller blind / venetian blind / vertical blind. Blinds must be removed with support channel & must stored in condition that it can be reused in as it is condition	25	M2		0
38	Demolishing kadappa / granite	Providing services for dismantling stone work such as kadappa / granite / marble or similar stone except kota, rate shall be inclusive of removal of mortar bedding if laid on kitchen platform & disposing outside tata power premises at designated local municipal authority dumping ground	37.5	M2		0
39	Dismantling railing	Providing servcies for dismantling any type of railing (SS / MS / GI ; single rail or double rail) and disposing it to tata power stores, rate shall be inclusive of man, material, tools such as gas cutting set / grinder cutter, shifting to stores so as to complete the job	12.5	M		0
40	Dismantling rolling shutter	Prov. Services for dismantling rolling shutter of any height & width including disposing it to tata power stores, payment for scaffolding to be paid extra if done more than 2 meter high	20	M2		0
41	Dismantling MS gate	Removing any type of ms gate and disposing it to stores scrap yard within 200 meter lead	20	M2		0
42	Removing & disposing paver block	Removal of existing paver blocks 60 - 80 mm thick & sand bedding and disposing outside tata power premises at designated local municipal authority	20	M2		0
43	Removing & stacking paver block	Removal of existing paver blocks 60 - 80 mm thick including sand bedding and stacking in owner premises within 200 meter lead	20	M2		0
44	Replacement of trench cover	Prov. Services for removal of existing trench cover and laying new trench cover, rate shall be inclusive of man, material, tools for replacement of trench cover but excluding of casting trench cover	25	EA		0
45	Prov. & laying PCC M-10	Supplying, providing and laying in position M - 10 plain cement concrete in levelling course/fill under or around foundations pits. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix	12.5	M3		0
46	Prov. & laying PCC M-15 (site mix)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix / mixer machine	3	M3		0

47	Prov. & laying PCC M-15 (RMC)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	30	M3		0
48	Prov. & laying PCC M-20 (site mix)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mixer machine	30	M3		0
49	Prov. & laying PCC M-20 (RMC)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: RMC	20	M3		0
50	Prov. & laying PCC M-25 (site mix)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mixer machine	30	M3		0
51	Prov. & laying PCC M-25 (RMC)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	30	M3		0
52	Prov. & replacing, precast RCC, M25	Providing and replacing of precast reinforced cement concrete structure, grade: M25, max w/c ratio: 0.5, rate to include shuttering, vibrating, machine mixing, providing lifting arrangement, placing insert curing handling, transporting with down graded aggregate: 20	25	M3		0
53	Prov. & laying PCC M-30 (RMC)	Supplying, providing and placing in position reinforced cement concrete of grade M30 with 20mm down graded aggregate for works below grade levels including vibrating, curing, de-watering wherever necessary, providing construction joints, leaving cut outs / pockets, placing of inserts/ embedment, etc., complete, including cost of providing, fixing and removing form work for all shapes (including scaffolding, centering etc) but excluding cost of providing reinforcement as directed by the engineer	20	M3		0
54	P/ L M-25 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M25 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	12.5	M3		0
55	P/ L M-20 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M20 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	12.5	M3		0
56	Prov. & laying plum concrete M - 15	Providing and placing in position plum concrete of required thickness, at all depths with 33% boulders of size 150mm to 230mm and 67% ready mix concrete of M15 grade including shuttering, vibrating, compacting, curing, dewatering, levelling, finishing, removal of formwork, etc. Complete as per specifications/drawings and as directed by the engineer-in-charge.	12.5	M3		0
57	Prvov. & const. Brick masonry 230mm	Providing all material and constructing brick masonry 230mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	12.5	M3		0

58	Prov. & const Brick Masonry 115mm	Providing all material and constructing brick masonry 115mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	12.5	M2		0
59	P/L uncoursed rubble masonry	Supplying, providing and laying, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer.	12.5	M3		0
60	Laying UCR masonry - rubble at site	Prov. Services for laying including tools tackles, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer., rubble to be brought from 50 m lead	12.5	M3		0
61	P/L pitching stone work	Providing all material for dry stone pitching : providing all the materials and laying 225 mm thick. Dry rubble pitching at all heights to correct line and level dry stone pitching with individual stones of 22 cm depth and minimum size 0.014cum. Complete with all leads and lifts for all materials and machinery including all charges and as directed by engineer-in-charge	12.5	M2		0
62	CLC/AAC/Siporex block masonry - 4"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness - 100 mm)	12.5	M2		0
63	CLC/AAC/Siporex block masonry - 8"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness # 200 mm)	12.5	M2		0
64	Making pocket, 300x300x150mm	Making of pocket, size:300 x 300 x 150 mm, at all levels with staging including grouting with cm 1:3 in concrete/masonry, debris must be disposed outside owner's premises at municipal corporation approved dumping yard	12.5	EA		0
65	P/A Internal plaster 12 mm	Providing 12mm. Thick smooth finished cement plaster in cement mortar (1:3) for RCC, brick work, sides and undersides of the slabs, canopies, chajjas with drip molding etc. Including scaffolding, curing, etc. Complete as per specifications.	25	M2		0
66	P/A external plaster 20mm	Providing all materials and carrying out sand faced plaster 20 mm thick in two layers (first layer of 14 mm and second layer of 6 mm thickness) with waterproofing compound. Including bands drip molds in cement mortar 1:4 including scaffolding (the rates shall include provision for chicken mesh 230 mm wide at the junction of masonry with RCC).	25	M2		0
67	P/A ready mix plaster - 20 mm	Prov. & applying ready mix plaster of Godrej make tuff Duro Plast / ACC make Suraksha ready to use plaster 101 or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, application and finishing of surface, curing	25	M2		0
68	P/A Raised or flush cement pointing	Providing all the materials and carrying out raised or flush cement pointing in 1:3 cement mortar including providing and erecting steel scaffolding (up to 2 meter), curing, edge finishing	25	M2		0
69	P/L IPS flooring- 75 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete including as per line & level required, finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 75 mm thick	25	M2		0

70	P/L IPS flooring- 50 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete as per line & level required, including finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 50 mm thick	25	M2		0
71	P/L floor tiles (800 x 800)	Providing and fixing 800 x 800 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and jointed with tile grout of ROFF / equivalent make, cutting of tiles to required size, cleaning, curing, etc. Complete.	12.5	M2		0
72	P/L floor tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and filling joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	37.5	M2		0
73	P/L wall tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	20	M2		0
74	P/L wall tiles (300 x 600)	Providing and fixing 300 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	12.5	M2		0
75	P/L acid resistant tiles	Providing all materials, tools, tackles & services for supplying & fixing acid resistant tiles. Scope includes 1) applying epoxy primer & allow it dry for 24 hr. 2) fixing the tiles by applying 5-8 mm thick paste made up from mixture of VIKO proof-SDK cement powder or equivalent sodium silicate cement powder & VIKO proof-SDK liquid binder or equivalent liquid binder in proportion of 1:3. 3) joints & gaps to be filled with VIKO proof ep-epoxy resin cement or equivalent acid	25	M2		0
76	P/L tile on existing tile-vitrified	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive up to 10 mm thick layer for vitrified tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent make of tile grout	12.5	M2		0
77	P/L tile on existing tile (ceramic)	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive upto 10 mm thickness for ceramic tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent make of tile grout	12.5	M2		0
78	P/F kota stone ,25mm thick	Providing and fixing at least 25 mm thick machine cut machine cut kota stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3)	32.5	M2		0
79	P/F white marble,15mm	Providing and fixing at least 15 mm thick machine cut machine cut white spotless marble stone of any sizes for windows / door jambs / lintel / sill with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	12.5	M2		0
80	P/F black granite stone,15mm	Providing and fixing at least 15 mm thick machine cut machine polished pitch black granite stone of any sizes for counter / cooking/platform with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, full bull nose or double bull nose molding & polishing of edges & redoing in cm (1:3)	12.5	M2		0

81	P/F Baroda green stone 15 mm	Providing and fixing at least 15 mm thick machine cut machine cut Baroda green stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	12.5	M2		0
82	Mirror polishing of kota/mosaic	P/s for mirror polishing of kota / mosiac flooring preceded by machine polish to bring level on joints and edges if required	20	M2		0
83	P/L Granite for sill / staircase	Providing and fixing 15 mm thick black granite on window sill, staircase tread & riser, 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of marble, raking and finishing the joints with silicon sealant, curing, rubbing, polishing and cleaning complete at all levels 2nos in steps with minimum 50mm overlapping and maximum of 300mm width in combination.	12.5	M		0
84	Edge molding	Prov. Services for molding of edge - bull nose or demi bull nose for all type of stones	12.5	M		0
85	P/F Paver block - 60 mm	Providing and fixing interlocking concrete paver blocks of 60mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties, octroi etc.the testing of paver block	12.5	M2		0
86	P/F paver block - 80 mm	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties, octroi etc.the testing of paver block	12.5	M2		0
87	Lay paver block available at site	Prov. Services for laying paver blocks available at site within 50 meter lead, rate shall be inclusive of shifting or transporting for given lead, 40 mm thick sand bedding, filling joints with sand	12.5	M2		0
88	P/F M 30 - 100 mm paver block	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties, octroi etc.the testing of paver block	12.5	M2		0
89	Prov. & fixing kerb stone M 20	Prov. & fixing kerb stone of size 150 x 300 mm made of M20 grade of concrete conforming to is 5758 (1994) (type 1d), rate shall be inclusive of man, material, transportation, hacking / breaking of PCC / asphalt, laying mortar (1:1) bedding to line and level, cutting / breaking of kerb stone to size and finishing joints with neat cement, housekeeping and disposal of debris outside tata power premises	12.5	M		0
90	P/L paver tile 20 mm	Prov. & laying 20 mm thick paver tile of M 20 grade on average sand bedding of 50 mm thickness to the line and level, rate shall be inclusive of man, material, transportation, tools, joint filling with sand so as to complete the job	12.5	M2		0

91	Sup/Fab/Placing Reinforcement Steel	Providing & binding reinforcement steel of any dia including binding wires, cleaning, bending, cutting, hoisting, placing in position, lapping and binding with 16 SWG annealed soft iron wire or tack welding reinforcement steel for all types of RCC work irrespective of locations & levels all as per drawings including handling and transporting steel from nearest stores to site complete as directed for HYSD bars.(FE-500 conforming to IS code 1786-1985).	5	MT		0
92	Fab & Erect Structural Steel Work	Fab & erection all types of mild steel, work at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel (excluding chequered plate)	7.5	MT		0
93	Prov./ Supply /Fab structural steel	Providing & fabricating & erecting all types of structural steel, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of steel(excluding chequered plate)	12.5	MT		0
94	Fab & Erect GI Work	Fab & erection all types of GI work, at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel (excluding chequered plate)	2.5	MT		0
95	Prov/Supply/Fab Structural Steel#GI	Providing & fabricating & erecting all types of GI material, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of steel(excluding chequered plate)	5	MT		0
96	P/F 16 SWG SS Wire Mesh	Providing all tools, tackles, materials for fixing of 16 SWG SS wire mesh of opening size 12.5 mm x 12.5 mm fixed with 12 mm U bolts as mentioned in the drawing or as directed by EIC at any height incl scaffolding, ladder, machinery etc.	12.5	M2		0
97	P/F/E Structural Steel(Tube & pipe)	Providing & fabricating & erecting all types of MS tubes & pipes, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of steel(excluding chequered plate)	2.5	TO		0
98	P/F MS Chequered Plate - 6 mm	Providing & fabricating & placing MS chequered plate - 6 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of steel	12.5	M2		0

99	P/F MS Chequered Plate - 8 mm	Providing & fabricating & placing MS chequered plate - 8 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of steel	25	M2		0
100	P/F MS Chequered Plate - 10 mm	Providing & fabricating & placing MS chequered plate - 10 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of steel	25	M2		0
101	P/F MS Grill	Providing, fabricating and erecting MS grills consisting of 12mm square rods with external frame of 20x6mm flats with safety flip door including applying one coat of primer & 2 coats of enamel paint to all the exposed surfaces of steel. Design will be as per AOC palette. All the required steel will be supplied by contractor. Contractor shall use his own welding set, gas cutting set with accessories, gas and electrodes to complete the entire work, as per the direction etc complete	12.5	M2		0
102	P/F GI Grating	Supplying and laying of grating, material: hot dip galvanized iron and providing all necessary material, tools, tackles & services, outer frame plate size: 40 x 6mm, short span plate size: 40 x 5 mm, bracing plate size: 40 x 5 mm and spacing of plate size: 40 mm	12.5	MT		0
103	P/F/E Al Chequered Plate 8 mm	Providing & fixing aluminum chequered plate of 8 mm thick with lifting arrangement cut provided as directed by EIC,	12.5	M2		0
104	P/F/E Al Chequered Plate 10 mm	Providing & fixing aluminum chequered plate of 10 mm thick with lifting arrangement cut provided as directed by EIC,	12.5	M2		0
105	P/F/E GI Tubular Handrail 2 Rail	Supplying, fabricating & erecting C class GI tubular h&railing of 32 mm dia. Nb medium class, consisting of double GI rail with top GI rail 1 mtr above floor level, mid rail at 600 mm from floor & pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary bends, GI tee joints, GI fixtures, GI fittings, 100 mm x 6 mm toe guard including applying one coat of primer & two coats of synthetic enamel excluding anchor fastener as directed by	12.5	M		0
106	P/F/E Single Rail C Class GI Pipe	Providing & fixing single handrail of C class GI pipe of 32 mm dia and connecting with wall with all necessary GI bends, GI tee joints, GI fixtures such as plate for connection at wall, the assembly should be sturdy and with smooth surfaces at joints/ junctions.	12.5	M		0
107	P/F/E Tubular Handrail - SS 2 Rail	SS pipes 304 mat finish /brush steel finish ss tabular handrailing consisting of double SS rail with top SS rail 1 mtr above floor level and pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary SS bends, SS tee joints, SS fixtures, SS fittings,100 mm x 6 mm ss toe guard excluding anchor fastener as directed as directed by engineer	12.5	M		0
108	P/F/E Tubular Handrail - SS 1 Rail	SS pipes 304 mat finish /brush steel finish consisting of one SS rail and connecting with wall with all necessary SS bends, SS tee joints, SS fixtures, SS fittings, the assembly should be sturdy and with smooth surfaces at joints/ junctions. All SS sections, pipes etc to be supported with documents for the quality	12.5	M		0
109	P/F/E SS Hand Rail - 4 Rail	Providing & fixing SS hand rail made of SS 304 satin finish of 1.5 mm thickness, with top rail of SS hollow pipe 50 mm dia and bottom 3 made of SS hollow pipe of 25 mm dia, supported by 50 mm dia @ 1.2 m c/c using bracket as per AOC palette, including cutting, bend, finishing of joints & bends, installation using required screws so as to complete the job	12.5	M		0

110	P/F/E MS Gate - Chainlink	Providing & fabrication of MS gate in single / double leaf with ISA 65 x 65 x 6 mm angle frame, both side MS flat of 10 mm x 6 mm to hold chainlink, 9 gauge chainlink within frame and painted by 2 coats of synthetic enamel preceded by red oxide primer, including hinges, MS aldrop, welding, gas cutting, shifting with 200 meter	12.5	M2		0
111	P/F/E Square Pipe MS Gate	Providing ,fabricating & erecting in position gate made of hollow box section as per the approved drawing using steel confirming to IS 2062/IS:1161 including supply of all materials such as hinges, locking arrangement, plunger bolts, SS wheels & fixtures, MS flat plate for wheels with anchors, making of wicket gate ,vision panel etc incl. of 2 coats of synthetic enamel paint with one coat of primer. (outer frame 90 x 60 x 3 mm, inner pipes - 25 x 25 x 3 mm, 3 nos. 100 mm hinges on each	6.25	M2		0
112	P/F/E 3mm Thick GI Perforated Sheet	Providing & fixing 3 mm thick GI perforated sheet with 50% opening holes, rate shall be inclusive of man, material, transportation, installation of sheet using tack weld or nut bolt as per site requirements, wastage and fixing sheet to line, level and alignment	12.5	M2		0
113	P/F pin type Anchor Fastener,16mm	Providing & fixing 16 mm dia, 100 mm long pin type anchor fasteners, including drilling the holes (other than HILTI)	37.5	NO		0
114	Anchor Fastener-HILTI HSA 12X100 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 100, rate shall be inclusive of drilling & fixing	12.5	NO		0
115	Anchor Fastener-HILTI HSA 12X145 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 145, rate shall be inclusive of drilling & fixing	12.5	NO		0
116	Anchor Fastener-HILTI HSA 12X175 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 175, rate shall be inclusive of drilling & fixing	12.5	NO		0
117	Anchor Fastener-HILTI HSA 16X102 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 102, rate shall be inclusive of drilling & fixing	12.5	NO		0
118	Anchor Fastener-HILTI HSA 16X137 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 137, rate shall be inclusive of drilling & fixing	12.5	NO		0
119	Anchor Fastener-HILTI HSA 16X182 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 182, rate shall be inclusive of drilling & fixing	12.5	NO		0
120	Anchor Fastener-HILTI HST2-R 12x105	Providing & fixing HILTI make anchor fastener HST2-R 12 x 105, rate shall be inclusive of drilling & fixing	12.5	NO		0
121	Anchor Fastener-HILTI HST2-R 12x145	Providing & fixing HILTI make anchor fastener HST2-R 12 x 145, rate shall be inclusive of drilling & fixing	12.5	NO		0
122	Anchor Fastener-HILTI HST2-R 16x140	Providing & fixing HILTI make anchor fastener HST2-R 16 x 140, rate shall be inclusive of drilling & fixing	12.5	NO		0
123	Anchor Fastener-HILTI HST2-R 16x170	Providing & fixing HILTI make anchor fastener HST2-R 16 x 170, rate shall be inclusive of drilling & fixing	12.5	NO		0
124	P/L Manhole Cover (LD 2.5) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
125	P/L Manhole Cover (LD 2.5) 450X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 450 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
126	P/L Manhole Cover (MD - 10) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (medium duty 10 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
127	P/L Manhole Cover (HD - 20) 900X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 900 x 450 (heavy duty 20 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
128	P/L Manhole Cover 300 X 300	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 300 x 300 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	3.5	EA		0
129	Replacement of Hinge of MS Gate 6"	Providing & replacing of hinge of gate, material: 6 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by enGIneer incharge.	7.5	EA		0
130	Replacement of Hinge of MS Gate 4"	Providing & replacing of hinge of gate, material: 4 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by engineer in charge.	7.5	EA		0

131	Ser. F/Greasing - Rolling Shutter	Providing material, labor and service for oiling and greasing of shutter, rates are inclusive of providing scaffolding	5	M2		0
132	Making Wicked Gate - Rolling Shutter	Providing all tools and tackles for making wicked gate in existing shutter at all levels and height, rate is inclusive of cutting, welding, all required material and scaffolding	3	M2		0
133	Repairing Gear Operator Shutter	Repairing steel rolling shutters of gear operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc.	5	M2		0
134	Repairing Hand Operator Shutter	Repairing steel rolling shutters of hand operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc.	5	M2		0
135	P/F Rolling Shutter Motor - 1 KV	Providing and fixing of electric motor of set 1KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	2.5	EA		0
136	P/F Rolling Shutter Motor - 1.5 KV	Providing and fixing of electric motor of set 1.5 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall include loading ,transportation and unloading of materials at site or as directed by EIC	2.5	EA		0
137	P/F Rolling Shutter Motor - 2 KV	Providing and fixing of electric motor of set 2 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	2.5	EA		0
138	P/F Rolling Shutter	Providing and fixing mechanically operated rolling steel shutters fabricated from 18G GI sheets with slide guides, bottom rail, brackets, door suspension shaft, housing box at operation arrangement, lock plates, locking arrangement, fixing bolts, pulling handles, hood, rolling arrangement & 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. wicket gate shall be paid under separate item, in that case area of wicket gate shall be deducted from this item for payment.	5	M2		0
139	Ser. for fab work- incl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, gas cutting set including gas consumption, all tools and tackles required for performing the fabrication job	2.5	DAY		0
140	Ser. for fab work- excl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, manpower, all tools and tackles required for performing the fabrication job	2.5	DAY		0
141	P/F/E Tray C- 150 Mm	Providing, fabricating and erecting of tray c shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 150 mm	12.5	M		0
142	P/F/E Tray C- 300 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 300 mm	12.5	M		0

143	P/F/E Tray C- 450 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 450 mm	12.5	M		0
144	P/F/E Tray C- 600 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 600 mm	12.5	M		0
145	Serv. Stretching chainlink fencing	Providing Services for stretching chain link fencing at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the job	25	M2		0
146	Serv. for Stretching barbed wire	Providing Services for stretching barbed wire at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the job	75	M		0
147	Serv for stretching concertina coil	Providing Services for stretching concertina coil at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the job	25	M		0
148	P/S GI chainlink fencing- 8 gauge	Providing & stretching GI chain link fencing of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter, including one coat of zinc primer and followed by two coats of synthetic enamel paint	25	M2		0
149	Prov./strech PVC coated chainlink	Providing & stretching PVC coated chain link fencing of bare GI chain link of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter	25	M2		0
150	Providing & fixing barbed wire	Providing & stretching IOWA type GI barbed wire conforming to IS 278: 2009 with 14 SWG x 14 SWG (main wire & barb wire) with spacing of barb at max. 5 inch c/c at required line & level including man, material & transportation	75	M		0
151	P/stretch concertina coil 610mm dia	Providing & stretching concertina coil PVC coated / GI concertina coil 610 mm having medium barbs of 20 mm width, max 8 circle of coil per meter, guided by 16 SWG guide wire on both sides, including transportation, manpower, cutting - lifting & placing	25	M		0
152	P/F galvalume sheet 0.5 mm thick	Providing, placing & fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coat thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, zinc aluminum alloy coated (zinc aluminum coating not less than 150g/sqm), MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting & SMP coating of DFT 5 microns over 5 micron primer	37.5	M2		0
153	P/F Galvalume sheet 0.65 mm thick	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.65 mm total coated thickness to match existing shade (bare galvalume thickness 0.6mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	37.5	M2		0

154	P/F Precoated Galvanized Iron sheet	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coated thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	37.5	M2		0
155	P/F Al patti 50 mm	Providing & fixing aluminum flat of 50 x 6 mm on roof sheet, rate shall be inclusive of man, material, GI threaded screw with rubber washer, drilling hole @ 2m c/c	12.5	M		0
156	P/F GI corrugate sheet , 16 gauge	Gi sheet providing & fixing 16 gauge corrugated GI sheet on roof & cladding with GI bolts, nuts, washers, sealant on bolt etc. complete as directed.	7.5	M2		0
157	P/F 3 mm thick FRP sheet, plain	Providing & fixing 3 mm thick plain FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	7.5	M2		0
158	P/F 3mm thick FRP sheet, corrugated	Providing & fixing 3 mm thick corrugate FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	7.5	M2		0
159	Fixing of GI / Galvalume/FRP sheet	Providing all necessary tools tackles & services for fixing GI / galvalume/FRP sheets, rates shall be inclusive of manpower, tools, tackles, scaffolding (up to 4 meter) self tapping polymer coated screw with rubber washer / j bolt with washer & nut, shifting lead up to 200 meter	12.5	M2		0
160	Supply of tarpaulin sheet	Supplying only of tarpauline sheet of 200 GSM of any size and shade as directed by engineer in charge. Rate shall include the cost of transportation, loading, shifting and unloading of material at site and handing over the material to person designated by respective division in charge with documentation. this item is exclusive of spreading of tarpaulin sheet.	12.5	M2		0
161	Spreading of tarpaulin sheet	Providing services for spreading of tarpaulin sheet of 200gsm at any height/sheet/terrace inclusive of making tying arrangement using 12mm polypropylene/nylon rope, rate shall be inclusive of man, material, transportation, ladder, scaffold to complete the job, payment will be made against area covered by tarpaulin, not the area of tarpaulin sheet used. Tarpaulin sheet supplied by tata power.	12.5	M2		0
162	P/F monsoon shed of tarpaulin sheet	Providing all tools, tackles and material for erecting monsoon shed for a period of 05(five) months and maintaining the same for the period. Bamboo frame work shall be made for laying 200 GSM tarpaulin sheet shed with vertical supports max. 1.00 m c/c & lateral support at max. 1.00 m c/c. All vertical supports should be of approx. 60 mm to 80 mm dia. The rate shall also include dismantling of the monsoon shed. The rate also includes obtaining necessary permission from MCGM.	37.5	M2		0
163	P/F PVC gutter 7 inch	Providing and fixing half round 180 mm uPVC gutter with rubber seal SWR grade-prince or equivalent make inclusive of joint brackets/running outlet/elbows/short stop end/stop end outlet/support bracket/pipe clamp or clamp/side or top bracket rate shall be quoted for man, material, transportation, scaffolding (up to 4 m), machine, screw so as to complete the job	7.5	M		0
164	P/F Wall Mounted EWC - Office WR(1)	Providing & fixing wall mounted EWC Hindware make studio series windsor (cat no. 20061) or Parryware make indus walvit series (C0255)	2.5	EA		0
165	P/F Wall Mounted EWC- Office WR(2)	Providing & fixing wall mounted EWC of Jaquar make DRS - WHT - 37591 or ARS - WHT - 39951UFSM along with slim seat cover with soft closer, bracket, finishing the side with near white cement	2.5	EA		0
166	P/F Floor Mounted EWC	Providing & fixing floor mounted EWC Hindware make universal series (20012) or Parryware make c0271 /	2.5	EA		0
167	P/F IWC	Providing & fixing Indian WC Orrisa pan popular (Hindware make -- 20043) or orrisa pan c0117 (Parryware make)	2.5	EA		0
168	P/F Urinal (Opt 1)	Providing & fixing urinal Hindware make cat no. 60011 or Parryware make new magnum c0575	2	EA		0

169	P/F Urinal - (Opt 2)	Providing & fixing Urinal Hindware make Corto standard (Cat no. 60022), rate shall be inclusive of man, material, tools, bracket, connection with plumbing & drainage line so as to complete the job	2	EA		0
170	P/F Wall Mounted Wash Basin	Providing & fixing wall mounted washbasin Hindware make studio series (Cat no. 10096) along with bracket, connections with plumbing & drainage line using applicable flexible hose & pipe	2.5	EA		0
171	P/F Under Counter Rim Wash Basin	Providing & fixing Hindware make under counter washbasin (cat no. 10065) or Parryware make c0419, along with CP coupling	2.5	EA		0
172	P/F Counter Top Wash Basin (Jaquar)	Providing & fixing Counter top wash basin Jaquar make - JDS - WHT - 25935, rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	2.5	EA		0
173	P/F Counter Top Washbasin(Hindware)	Providing & fixing Counter top wash basin Hindware make monalisa over counter basin (cat no. 10069), rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	2.5	EA		0
174	P/F Flush Tank	Providing & fixing Hindware make sleek elegance dual flush tank	2.5	EA		0
175	P/F Concealed Flush Tank	Providing & fixing concealed flush tank Hindware make concealo 80 mm (508179) or Parryware Linea 80 mm C8114	2.5	EA		0
176	P/F Health Faucet	Providing & fixing health facuet of Hindware make flora series cat no. F160023 or Jaquar make allied series ALD 573	5	EA		0
177	P/F Jet Spray	Providing & fixing JET SPRAY of 12 mm dia and fixing it on WC seat	5	EA		0
178	P/F EWC Seat Cover	Providing & fixing Hindware make white color EWC seat cover as per required size	2.5	EA		0
179	P/F S.S. Sink	Providing & fixing Nirali make SS sink elegance popular series	2.5	EA		0
180	Prov. & Fix CP Floor Trap - 100 mm	Providing & fixing CP floor trap 100 mm dia with interlocking plate mounted on floor	5	EA		0
181	Prov & Fix PVC Nahani Trap - 100 mm	Providing & fixing PVC nahani trap 4 inch,	5	EA		0
182	P/F Nahani Trap 3	Providing & fixing 100 mm dia 3 way PVC nahani trap	5	EA		0
183	P/F Nahani Trap 4	Providing & fixing 100 mm dia 4 way PVC nahani trap	5	EA		0
184	P/F Bib Cock	Providing & fixing CP concealed bib cock Hindware made F 280002 or Jaquar make FLR 5041 along with its flange cap	5	EA		0
185	P/F Stop Cock	Providing & fixing CP concealed stop cock Hindware made F 280004	5	EA		0
186	P/F Angle Cock	Providing & fixing Angle cock Jaquar make FLR CHR	5	EA		0
187	P/F 2 Way Bib Cock	Providing & fixing 2 way bib cock Jaquar make FLR 5041 n or Hindware make F280003	5	EA		0
188	P/F Pillar Cock	Providing & fixing Hindware make pillar cock f280001 or Jaquar make FLR 5015	5	EA		0
189	P/F Pillar Cock Tall	Providing & fixing tall pillar cock Jaquar / Hindware make as per approved AOC palette (Jaquar make F460002CP / Hindware make F400005CP)	5	EA		0
190	P/F Sink Cock	Providing & fixing CP sink cock Jaquar make FLR 5009b or Hindware make f280026	5	EA		0
191	P/F Flush Valve 32mm	Providing & fixing flush valve 32 mm flow size Jaquar make FLV 1085 sq with concealed body & cover plate	5	EA		0
192	P/F Flush Valve 40mm	Providing & fixing flush valve 40 mm flow size Jaquar make FLV 1089 sq with concealed body & cover plate	5	EA		0
193	P/F Urinal Flush Valve	Providing & fixing Urinal flush valve PRS - CHR - 073 including cover plate	5	EA		0
194	P/F CP Bottle Trap,31mm	Providing & fixing 31 mm bottle trap of Jaquar make allied series ALD 769 or Hindware make flora series f850015	5	EA		0
195	P/F Overhead Shower With Mixer	Providing fixing overhead shower, code: cat. No. Ohs 1709 round shape single flow with air effect abs body & face plate chrome plated rubit cleaning system, single lever shower mixer code: FLR CHR 5123, shower arm: code: sha 479l300 round shape with 90º bend for wall mounted showers with flange	2.5	EA		0

196	P/F Bath Tub Spout	Providing & fixing Jaquar make bath tub spout SPJ 15429, rate shall be inclusive of concealed body, man, material tools, transportation required to carry out the job so as to fir for use"	2.5	EA		0
197	P/F Diverter in Washroom	Providing & fixing single liver concealed diverter body Jaquar make ALD - 055, with exposed part kit FON - 40055K	2.5	EA		0
198	P/F ovrhead Shower	PROVIDING AND FIXING OF CHROME PLATED SHOWER, DIAMETER: 100 MM of Jaquar- Code-OHS 1709 WITH LONG ARM code SHA-479 L450	5	EA		0
199	P/F Waste Coupling	Providing & fixing waste coupling Jaquar make 32 mm dia ALD - CHR - 705L130	7.5	EA		0
200	P/F Flexible Pipe	Providing & fixing flexible pipe 32 mm dia	7.5	EA		0
201	P/F Hose Pipe	Providing & fixing PVC hose pipe of 12 mm dia including connecting with plumbing fixtures	7.5	EA		0
202	P/F Foot Operated Tap	Providing & fixing Jaquar exposed foot operated valve PRS-STL-033EF	5	EA		0
203	P/F Double Coat Hook	Providing & fixing Double coat hook Jaquar make AKP-CHR-35761P	5	EA		0
204	P/F Grab Bar - 600 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1507 (600 mm long)	5	EA		0
205	P/F Grab Bar 450 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1503 (450 mm long)	5	EA		0
206	P/F Grab Bar 300 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1501 or AKP-CHR- 35701 (300 mm long)	5	EA		0
207	P/F Toilet Roll Holder	Providing & fixing toilet paper roll holder Jaquar make Kubix prime series (AKP 35753PS) or Continental series (ACN - 1153N)	5	EA		0
208	P/F Soap Dispenser	Providing & fixing Soap dispenser Shresmo make SHD - 12618	5	EA		0
209	P/F Tissue Paper Dispenser	Providing & fixing Tissue paper dispenser Euronics make EP23 or Opera make	5	EA		0
210	P/F Eye Washer System	SAFETY Eye Washer SHOWER - 6250 GI Udyogi Safety Shower & eyewash operates independently by pull rod, H& push lever & foot lever Shower: Extra-large drench shower head made of highly visible yellow ABS plastics Pipe: ISI marked GI pipe with powder coating for anti-corrosion Valve: SS stay open ball valve with yellow ABS push plate Bowl: Receptor bowl made of ABS & highly resistant to acid, Alkali & oil among others. Atomiser heads: Twin soft flow atomiser head which has	2.5	EA		0
211	Prov., Laying & Fix, UPVC 12mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 12 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
212	Prov.,Laying&Fix,UPVC 19mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme dia 19mm	5	M		0
213	Prov.,Laying&Fix, UPVC 25mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 25 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
214	Prov.,Laying&Fix, UPVC 32mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 32 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
215	Prov.,Laying&Fix, UPVC 38mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 40 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make:	5	M		0
216	Prov.,Laying&Fix, UPVC 50mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends - 50 mm	5	M		0
217	Prov.& Replcng CPVC 12mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:12 mm	5	M		0

218	Prov.& Replcng CPVC 19mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:19 mm	5	M		0
219	Prov.& Replcng CPVC 25mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:25 mm	5	M		0
220	P/F Pipe, C Class, GI 12mm	Providing & fixing RST / Hindustan make c class GI pipe of 12 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
221	P/F Pipe, C Class, GI 19mm	Providing & fixing RST / Hindustan make c class GI pipe of 19 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
222	P/F Pipe, C Class, GI 25mm	Providing & fixing RST / Hindustan make c class GI pipe of 25 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
223	P/F Pipe, C Class, GI 32mm	Providing & fixing RST / Hindustan make c class GI pipe of 32 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
224	P/F Pipe, C Class, GI 38mm	Providing & fixing RST / Hindustan make c class GI pipe of 38 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
225	P/F Pipe, C Class, GI 50mm	Providing & fixing RST / Hindustan make c class GI pipe of 50 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
226	P/F Pipe, C Class, GI 65mm	Providing & fixing RST / Hindustan make c class GI pipe of 65 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	5	M		0
227	P/F SWR 75mm PVC Pipe Type A	Providing & fixing SWR 75 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
228	P/F SWR 90mm PVC Pipe Type A	Providing & fixing SWR 90 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
229	P/F SWR 110mm PVC Pipe Type A	Providing & fixing SWR 110 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
230	P/F SWR 160mm PVC Pipe Type A	Providing & fixing SWR 160 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
231	P/F SWR 75mm PVC Pipe Type B	Providing & fixing SWR 75 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
232	P/F SWR 90mm PVC Pipe Type B	Providing & fixing SWR 90 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
233	P/F SWR 110mm PVC Pipe Type B	Providing & fixing SWR 110 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
234	P/F SWR 160mm PVC Pipe Type B	Providing & fixing SWR 160 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	5	M		0
235	Prov./Laying Salt Glazed Pipe 100mm	Providing & laying salt glazed pipe of 100 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	5	M		0

236	Prov./Laying Salt Glazed Pipe 150mm	Providing & laying salt glazed pipe of 150 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	5	M		0
237	Prov./Laying Salt Glazed Pipe 200mm	Providing & laying salt glazed pipe of 200 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	5	M		0
238	Prov.&Laying Hume Pipe,150mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 150 mm dia.	5	M		0
239	Prov.&Laying Hume Pipe,200mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 200 mm dia.	5	M		0
240	Prov.&Laying Hume Pipe,300mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 300 mm dia.	5	M		0
241	Prov.&Laying Hume Pipe,450mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 450 mm dia.	5	M		0
242	Laying of HDPE Pipe Of Any Dia	Providing Services for laying of HDPE pipe of any dia, rate shall be inclusive of man, shifting of material from local Tata Power stores to the site, cutting, laying and disposing wastage at Tata Power scrap yard, rate will be exclusive of necessary excavation or allied work	5	M		0
243	Prov.,Cutting&Fix,Pipe,HDPE,140mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 140 mm	5	M		0
244	Prov.,Cutting&Fix,Pipe,HDPE,200mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 200 mm	5	M		0
245	P/F,Gate valve,12mm ISI Marked	Providing and fixing of gate valve, diameter: 12 mm, ISI make or make: ganga	5	EA		0
246	P/F,Gate valve,19mm ISI Marked	Providing and fixing of gate valve, diameter: 19 mm, ISI make or make: ganga	5	EA		0
247	P/F,Gate valve,25mm ISI Marked	Providing and fixing of gate valve, diameter: 25 mm, ISI make or make: ganga	5	EA		0
248	P/F,Gate valve,39mm ISI Marked	Providing and fixing of gate valve, diameter: 39 mm, ISI make or make: ganga	5	EA		0
249	P/F,Gate valve,50mm ISI Marked	Providing and fixing of gate valve, diameter: 50 mm, ISI make or make: ganga	5	EA		0
250	P/F Water meter 3 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 3 inch dia pipe	1.5	EA		0
251	P/F Water meter 4 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 4 inch dia pipe	0.5	EA		0
252	P/F Foot Valve - 1 Inch	Providing & fixing Fixing brass foot valve of 1 inch foot valve along with necessary accessories	7.5	EA		0
253	P/F Foot Valve -1.5 Inch	Providing & fixing Fixing brass foot valve of 1.5 inch foot valve along with necessary accessories	7.5	EA		0
254	P/F Foot Valve - 2 Inch	Providing & fixing Fixing brass foot valve of 2 inch foot valve along with necessary accessories	7.5	EA		0
255	P/F Foot Valve - 2.5 Inch	Providing & fixing Fixing brass foot valve of 2.5 inch foot valve along with necessary accessories	7.5	EA		0
256	P/F Foot Valve - 3 Inch	Providing & fixing Fixing brass foot valve of 3 inch foot valve along with necessary accessories	7.5	EA		0
257	P/F Pressmatic Tap	Providing & fixing Jaquar make PRS - CHR - 031 pressmatic tap	7.5	EA		0

258	P/F brass Rod Ball Cock,12mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 12 mm, first quality and of ISI approved make	5	EA		0
259	P/F brass Rod Ball Cock,19mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 19 mm, first quality and of ISI approved make	5	EA		0
260	P/F brass Rod Ball Cock,25mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 25 mm, first quality and of ISI approved make	5	EA		0
261	P/F brass Rod Ball Cock,50mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 50 mm, first quality and of ISI approved make	5	EA		0
262	P/F 500 Ltr PVC Tank	Providing & connecting 500 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	2	EA		0
263	P/F 1000 L PVC Tank	Providing & connecting 1000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	2	EA		0
264	P/F 2000 L PVC Tank	Providing & connecting 2000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	2	EA		0
265	P/F 5000 L PVC Tank	Providing & connecting 5000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	4	EA		0
266	Providing Plumbing Services	Providing Services for misc plumbing works, rate shall be inclusive of manpower of 1 plumber & helper	7.5	EA		0
267	Prov. Plumbing Material for repairs	Providing Necessary material for plumbing work as approved by EIC, Payment will be made against submitted original invoice / challan of material, including 15% vendor's profit	7.5	EA		0
268	Replacement of Sensor Tap-Washbasin	Providing & fixing sensor tap Hindware make F240001CP or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, removal of existing tap and installation of new tap	7.5	EA		0
269	Replacement of Sensor Batteries	Removing and replacing of sensor batteries, plumbing services including all required tools, tackles, materials, and fixtures, including loading, unloading and transportation up to site for laying etc. complete as directed for following items	7.5	EA		0
270	P/F FRP Grating - 38 X 38 X 38	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (7 - 5 mm), height 38 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	5	M2		0
271	P/F FRP Grating - 38 X 38 X 25	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (6 - 5 mm), height 25 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	5	M2		0
272	P/F FRP Grating - 50 X 50 X 12	P/F FRP molded grating of mesh size 50 X 50 mm with rib thickness (8 - 5 mm), height 12 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	5	M2		0
273	P/F FRP pultruded grating 50 mm thk	Supplying and installation of FRP cover grating code CT40-200 with frame of 50x50x5mm angle and 3mm top chequered plate load bearing capacity of 2200kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin. Colour #	5	M2		0
274	P/F FRP pultruded grating 75 mm thk	Supplying and installation of FRP cover grating 75 mm thick light weight code ct25-200 (25 mm thick grating) plus frame of 50x50x5mm box pipe, and 3mm top chequered plate load bearing capacity of 400kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin. Colour # yellow.	5	M2		0
275	P/F FRP manhole cover (900 mm dia)	Prov. & fixing 900 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
276	P/F FRP manhole cover (750 mm dia)	Prov. & fixing 750 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
277	P/F FRP manhole cover (600 mm dia)	Prov. & fixing 600 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0

278	P/F FRP manhole cover (300 X 300)	Prov. & fixing 300 X 300 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
279	P/F FRP manhole cover (450 X 450)	Prov. & fixing 450 X 450 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
280	P/F FRP manhole cover (450 X 600)	Prov. & fixing 450 X 600 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
281	P/F FRP manhole cover (450 X 900)	Prov. & fixing 450 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
282	P/F FRP manhole cover (600 X 900)	Prov. & fixing 600 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton load	2.5	EA		0
283	FRP storm water drain cover 300X300	Prov. & fixing 300 X 300 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
284	FRP storm water drain cover 450X450	Prov. & fixing 450 X 450 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
285	FRP storm water drain cover 450X600	Prov. & fixing 450 X 600 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
286	FRP storm water drain cover 450X900	Prov. & fixing 450 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
287	FRP storm water drain cover 600X900	Prov. & fixing 600 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5 ton load	2.5	EA		0
288	P/F FRP fencing	Supplying & Installation of FRP Fencing to sub station of height 2.4 M, with FRP Vertical pipe 50x50x5mm, & FRP Angle of 50x50x5mm, & FRP Grill of square 38mmx38x10mm, thickness 6 mm. The grill are fitted in the Angle frame, which will be fixed on Vertical pole with Foot pad 150x150x130mm, using Anchor Fastener of 16 mm HILTI Made as per given dawing. incl. gate made with same framing, SS Hinge & aldrop. Material to be used will be as per IS 6746 ISOPTHALIC POLYSTER	2.5	M		0
289	P/L FRP septic tank	P/I FRP septic tank, rate shall be inclusive of man, material, tools, transport, installation to the line & level and connecting it with sewage system	2.5	L		0
290	P/F FRP railing	Supplying, fabricating and erecting of approved shade FRP Pultruded handrail square pipe having size 50X50X6.35 mm thick consisting of double FRP rail with top rail & mid rail at 1000 mm & 500 mm respectively & Vertical pipe post of square pipe having size 50X50X6.35 mm thick erected at not more than 1500 mm c/c distance including its own connecting foot pad of size 150 x150 x130 mm fitted with SS 304 M12 -100 LG anchor bolt at bottom with all neceessary accessories and 100 X3 mm toe guard	5	M		0
291	P/F FRP perforated cable trays	Prov. FRP make perforated cable trays of size 450 mm including support	5	M		0
292	P/F FRP chajja	Prov. & fixing 3 mm thick FRP Chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site including scaffolding (up to 12 meter)	2.5	M2		0
293	P/F FRP chajja - excl. scaffolding	Prov. & fixing 3 mm thick FRP chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site, excluding scaffolding and manlifter	7.5	M2		0
294	P/F CMRCL flush door shtr,38mm	Providing Services & material for 38 mm thick commercial flush board shutter with 1 mm thick laminate of Century / Greenlam / Kitply of required shade, 6 mm thick 2 year seasoned teakwood lipping, making any cutout for glass including fixing of glass with beading, 3 nos. 4 inches railway type hinges, 110 mm CP handle, CP aldrop, door stopper on each shutter, sneak hole with glass, painting of lipping by 2 coats of	5	M2		0
295	P/F kitchen under counter shutter	Providing Material & fixing under counter kitchen cabinet with frame & shutter, rate shall be inclusive of 1 inch thick frame, 18 mm Greenply made plywood shutter with 1 mm century laminate Natural Oak 3397 & white sun mica internal side, 6 mm lipping of all four side, chrome plated handle, magnet lock, SS hinges, two coat paint of synthetic enamel paint of approved shade	5	M2		0

296	P/F fire rated door with panic bar	Providing , fixing, loading unloading , single Leaf 2 hrs fire resistant door with 44 mm shutter thickness, in fill honey comb core, doors shutter made of GI sheet of 0.9 mm thick and frame made of GI sheet of 1.3 mm thick with single rebate frame of 100 * 75 mm . Powder coated frame & shuter with 50-60 micron, including 6 mm thick fore rated galss panel for clear vision 200 * 300 mm, SS 304 fire rated ball bearing hinges , with panic bar single point, external trim, door closer &	2.5	M2		0
297	P/F Al anodised,window,2 track	Providing, erecting and fixing of aluminum anodized sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class B section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per IS code or as directed	7.5	M2		0
298	P/F Al anodised,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
299	P/F Al anodised,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
300	P/F Al powder coated,window,2 track	Providing, erecting and fixing of aluminum powder coated sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class b section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
301	P/F Al powder coated,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal make class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
302	P/F Al powder coated,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal make b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	7.5	M2		0
303	P/F domal section windows (2 track)	Providing & fixing 2 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or	7.5	M2		0
304	P/F domal section windows (3 track)	Providing & fixing 3 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or	7.5	M2		0

305	P/F UPVC windows	Providing & fixing factory made white UN-Plasticized poly Vinyl chloride (UPVC) windows(FENESTA or Equivalent as approved by site in charge) at all levels made out ofextruded three chambered profile frame with hermetically sealed double glazed glass customized in 56mm wide system ,all fittings and fixing at site andsealing the gaps etc. as per the designed and as directed by site in charge.	7.5	M2		0
306	P/F Al powder coated fixed windows	Providing & fixing Al powder coated fixed window using 63 X 38 X 14 gauge powder coated Al section with powder coating min. 50 micron on exposed surface, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	5	M2		0
307	P/F Al anodized fixed windows	Providing & fixing Al anodized window using 63 X 38 X 14 gauge powder coated Al section with buffing of all sections, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	5	M2		0
308	P/F Anodized Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal make anodized and buffed as per required shade, with Z section for installation of 100 mm wide blur / frosted annealed glass	5	M2		0
309	P/F powder coated Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal , with Z section for installation of 100 mm wide blur / frosted annealed	5	M2		0
310	P/F Anodized Al partition	Providing & fixing Al anodized partition made of 63 X 38 mm 14 gauge Jindal make sections, with buffing of all surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	5	M2		0
311	P/F Al powder coated partition	Providing & fixing Al powder coated partition made of 63 X 38 mm 14 gauge Jindal make sections, with min 50 micron powder coating at exposed surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	5	M2		0
312	P/F Aluminum anodized door	Providing & fixing partly glazed partly panelled Al anodizing door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top	5	M2		0
313	P/F Aluminum powder coated door	Providing & fixing partly glazed partly panelled Al powder coated door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top, minimum 50 micron powder coating	5	M2		0
314	P/F Aluminum framed backelite door	Providing & fixing backelite door made of 16 gauge X 25 X 65 mm Al powder coated frame with 3 mm thick backelite sheet along with 4 inch tower bolt, 3 nos. hinges, installation	5	M2		0
315	P/F Al grill (2 x 2 inch)	Providing & fixing Al Grill - mesh opening 50 mm X 50 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	5	M2		0
316	P/F AL grill (3 x 3 inch)	Providing & fixing Al Grill - mesh opening 75 mm X 75 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	5	M2		0
317	P/F Door closer	Providing & fixing HYPER / GODREJ (9420) / ENOX / DORMA (TS 71) MAKE DOOR CLOSER	5	EA		0
318	P/F concealed door closer	Providing & fixing concealed door closer Godrej / Dorma / Enox make as per approved AOC palatte	5	EA		0
319	P/F door floor spring	Providing & fixing Floor spring including making cut out in floor and fixing of spring, rate shall be inclusive of man, material, installation so as to complete the job. (Product - Dorma make BTS 75V / Godrej make 9424)	5	EA		0

320	P/F PVC beading of windows	Providing & replacing beading of sliding windows with PVC beading, rate shall be inclusive of man, material, opening of window shutter and replacing beading, refixing	5	M		0
321	P/replacing friction stay hinges	Providing & replacing SS 430 / SS 201 friction stay hinge of openable window of 10 inch for max width 1200 mm, , rate shall be inclusive of manpower, material, removal of window, replacement of hinge and reinstallation of window	5	EA		0
322	P/F cp tower bolt 6	Providing & fixing 6 inch CP tower bolt	5	EA		0
323	P/F CP tower bolt 8	Providing & fixing 8 inch CP tower bolt	5	EA		0
324	P/F aldrop	Providing & fixing 12 inch CP aldrop	5	EA		0
325	Prov. & replacing SS wire mesh 24G	Providing & replacing ss mosquito mesh of existing sliding windows shutters at all heights including removing damaged mesh, providing new ss mosquito mesh 24 gauge 16 mesh and fixing it in window as earlier of matching shape and design with nails / screw complete with finishing as directed by TPC engineer.	5	M2		0
326	P/F cylindrical lock	Providing & fixing cylindrical lock Godrej / Enox / Hafele / equivalent make as per AOC palette	5	EA		0
327	P/F mortise lock (office door)	Providing and fixing brass mortise latch & lock 100mm X 65mm with 6 levers & a pair of brass lever handle(for main door).	5	EA		0
328	P/F 12 mm thk toughened glass door	Providing & fixing 12 mm thick toughened glass door cut to the required size with Godrej make Patch fittings for top, bottom pivot and side patches, rate shall be inclusive of man, material, transportation and installation at site	2.5	M2		0
329	P/F toughen glass door lock - door	Providing & fixing toughen glass door lock (Godrej make - prod code 7780)	2.5	EA		0
330	P/F toughen glass door lock - floor	Providing & fixing Bottom lock in glass door Godrej make Bottom lock patch 7759 or Godrej make Side lock patch 7764.	2.5	EA		0
331	P/F door stopper	Providing & fixing chrome plated door stopper	5	EA		0
332	P/F door buffer	Providing & fixing 100 mm long door buffer made of	5	EA		0
333	P/A of sun film	Providing & applying Garvare make sun control film of required shade, Garware make high heat rejection film HHR 25	12.5	M2		0
334	P/F white board film	Providing & fixing Garware make White Board film of PTE film thickness 150 micron	5	M2		0
335	P/F partition cubicle for washroom	Providing & fixing Modular cubical in 12mm compact laminate of approved color and texture with ss hardware comprising of door shutter, wall fixing rose, head, rail, wall bracket, tubular holder, corner connector, coat hook cum door stopper, lock cum occupancy indicator, hinge, door knob, adjustable foot and all other necessary accessories required to complete the job in all respect. Make - matrix, Greenlam	5	EA		0
336	P/F urinal partition	Providing & fixing urinal partition: providing and fixing of urinal composite partition of approved colour and make including all tools and tackles fixing at site in line and level etc complete as directed.	7.5	EA		0
337	P/F mirror - 600 x 450	Providing & fixing mirror of size 600 X 450 along with bracket / studs	2.5	EA		0
338	P/F mirror - circular	Providing & fixing Mirror of 550 mm dia along with brakcet / studs	2.5	EA		0
339	P/F toughen glass 12 mm	Providing & fixing 12 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gauge Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	5	M2		0
340	P/F toughen glass 8 mm	Providing & fixing 8 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gague Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	5	M2		0
341	P/F H handle for glass door(450 mm)	Providing & fixing of Godrej make H tyep HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (length - 450	5	EA		0
342	P/F H handle for glass door(600 mm)	Providing & fixing of Godrej make H type HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (lentgh 600	5	EA		0
343	P/F cabin door handle	Providing & fixing of Godrej make NEH 03 handles	5	EA		0
344	Silicon sealant - stone to al	Providing & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to granite / marble stone	5	M		0

345	Silicon sealant - masonry to al	Poviding & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to cement plaster surface	5	M		0
346	Silicon sealant - glass to glass	Providing & applying clear silicone sealant of Dow / Dr. Fixit silicon sealant suitable for glass	5	M		0
347	P/F gypsum board false ceiling	Providing & fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing and fixing of framework as spelled out in approved manufacturer catalogue. Bidder to provide adequate steel sections & hanger supports, including making openings for ac grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick.Vertical / inclined face shall be measured above	25	M2		0
348	P/F tegular grid ceiling	providing & fixing tegular grid ceiling system, at all heights including providing and fixing of framework in silhouette system sections as spelled out in Armstrong or equivalent manufacturer catalogue. Ceiling tiles shall be of size 600 mm x 600 mm of approved color. Incl. adequate steel sections (channel, main runner, cross runner in silhouette section) and hanger / GI wire supports to cater to the false ceiling loads. Approved make: Armstrong or equivalent	25	M2		0
349	P/F gypsum board false ceiling-Band	Providing all materials and fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing & fixing of framework as spelled out in Saint Gobain or equivalent. Incl. adequate steel sections (channels, L or T sections) and hanger supports to cater to the ceiling loads. Incl. making openings for AC grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick. (For width below 200	50	M		0
350	P/F gypsum board	Providing all materials and fixing monolithic gypsum board conforming to IS 2095, at all heights on existing supports. Vertical / inclined face shall be measured above 200 mm high only. For payment purpose false ceiling shall be measured in plan only.	22.5	M2		0
351	P/F 3 mm thick backelite sheet	Providing all materials and fixing 3 mm thick backelite sheet, at all heights on existing supports. For payment purpose false ceiling shall be measured in plan only.	22.5	M2		0
352	P/F PVC false ceiling	Providing & fixing PVC ceiling planks 7 to 10 mm thick, including providing and fixing of framework as spelled out in manufacturer catalogue. Quote shall include sealing off the ends, capping, all support systems, edges framing etc.	22.5	M2		0
353	P/F false ceiling - open cell # WR	Providing & fixing of open cell cellio metal false ceiling system at all heights including providing and fixing of framework as spelled out in Armstrong or equivalent, size 600 mm x 600 mm. including providing adequate steel sections (channels, i or t sections) and hanger supports to cater to the false ceiling loads. Owner would check the design and adequacy and has the right to reject if found inadequate. Job to be complete in all	7.5	M2		0
354	P/F perforated false ceiling	Prov & fixing of Infratop false ceiling with hidden/visible perforations, of panel sizes of 340mmx 2700mm, resistant to moisture, borer-fungus-termite attack. Panels to be installed with GI / Aluminum sections of suitable gauge & size according to site conditions. Panels SV 08/07 &09 with suitable trims SV 15 with dimensions 40x19x22x12x3050 mm for edge profiles & SV 18 with dimensions 67x3050 mm with T head of 42mm for connecting profiles. 10 years warranty for colour & finish of the panels	12.5	M2		0
355	Fixing existing false ceiling	Providing Services for fixing of available false ceiling panel by laying new mesh of silhouette section supports, rate shall be inclusive of man, material, tools & tackles, transportation	12.5	M2		0
356	P/F Antistatic false flooring-300mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-for	12.5	M2		0

357	P/F Antistatic false flooring-450mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-for	12.5	M2		0
358	P/F Antistatic false flooring-600mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-for	12.5	M2		0
359	Installing existing false flooring	Providing Services for installation of existing false flooring panels, rate shall be inclusive of manpower, flooring support of 450 mm, laying & fixing supports to the line and level, cutting of flooring panels as per site requirement and installation	12.5	M2		0
360	P/F ACP cladding	Supplying and fixing aluminum composite panel of approved make and colour for exterior application. The 4 mm thick panels of 3mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with self-adhesive peel off masking foil with PVDF base coating on top side and rear side would be in mill finish. As per the specification duly fabricated on imported holzer machines and fixed to extruded aluminum sections	12.5	M2		0
361	P/ F ACP cladding (firewall a2)	Providing & fixing Aludecor make firewall a2 ACP sheets or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, al support structure using 25 x 25 mm square pipe, cutting of sheet, wastage and disposing of debris outside tata power premises	7.5	M2		0
362	P/F ACP cladding (excl. support)	Providing & fixing ACP sheet of approved make & colour for exterior application. The 4 mm thick panels of 3 mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with PVDF base coating on top side & rear side would be in mill finish. fixed to existing support framing	25	M2		0
363	Removing of blinds	Providing Services for removal of vertical / roller blinds and disposal it scrap yard or designated place as instructed by EIC	25	M2		0
364	Fixing of available blinds	Providing Services for fixing of existing available roller blind / vertical blinds, rate shall be inclusive of manpower, necessary screws or minor fixtures to complete the job	7.5	M2		0
365	P/F vertical blinds	Providing and fixing of vertical blind for window. Providing Aluminum channel with 100mm fabric size with operating unit .etc providing all equipment, material, tools, tackles etc for fixing blinds of approved make and shade etc complete as directed by site in	7.5	M2		0
366	Serv. for repair of vertical blinds	Providing services for repairing chain / holder etc for vertical blind.	7.5	M2		0
367	P/F roller blind	Providing and fixing of roller blind for window, providing, translucent fabric, with Aluminum frame and control unit along with the material, tools, tackles etc for fixing blinds for windows of approved make and shade by tata power etc complete as directed (product - platina make 01a bamboo or 01a alfa)	7.5	M2		0
368	Prov services of carpenter (1+1)	Providing carpentry services for one shift, rate shall be inclusive of one carpenter & one helper	7.5	EA		0
369	Prov Material for carpentry repairs	Providing Material for minor carpentry works, payment will be made against submitted bills and challans of material, incl. 15% profit for vendor	7.5	EA		0
370	Chair repair - handle (godrej)	Providing & replacing handle of chair for Godrej make leoma	2.5	EA		0
371	Chair repair - handle (stellar)	Providing & replacing handle of chair for stellar make Rev CH 16	2.5	EA		0
372	Chair repairs - wheel	Providing & replacing wheel of chair of Godrej / stellar make chairs	2.5	EA		0
373	Repl. Hyd. Cylinder chair (godrej)	Providing & replacing hydraulic cylinder of chair (for Godrej make leoma) along with handle	2.5	EA		0
374	Repl. Hyd. Cylinder chair (stellar)	Providing & replacing hydraulic cylinder of chair (for stellar make Rev CH 16) along with handle	2.5	EA		0

375	Prov. & replacing laminate 1 mm	Providing & replacing laminate of wooden door or shelf, rate shall be inclusive of removal of existing laminate by heating, grinding the surface to the smoothest possible, applying adhesive and pressing 1 mm thick laminate of approved shade and make over cleaned surface, rate shall be inclusive of man, material, transportation, wastage and disposal of debris, removing & refixing of door	2.5	M2		0
376	Removal and refixing of door	Removing and refixing of wooden door (size height: 80-inches (6-feet, 8-inches) thickness: 1 ¾-inches. Width: 36-inches, providing all tools tackles material for removing and refixing the wooden door completed as	2.5	M2		0
377	Marking & Painting of Strips 100mm	Marking and painting of strip, width: 100 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect alignment	12.5	M		0
378	Marking & Painting of Strips 75 Mm	Marking and painting of strip, width: 75 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect alignment	12.5	M		0
379	Marking & Painting of Strips 50 Mm	Marking and painting of strip, width: 50 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect alignment	12.5	M		0
380	Providing & Carrying Out White Wash	Providing & carrying out Whitewash by cleaning the surface by using brush, making it free from any loose or foreign material, dirt, oil, grease etc., preparing white wash water with mixing 1kg class D lime with 6 litres of water, leaving it for 2 days for uniform thin cream, mixing glue 100 gm per 6l of whitewash water, then applying it in two coats to achieve uniformity in white	12.5	M2		0
381	P/A 2 Coats of Lime Geeru Upto 3 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime.	7.5	EA		0
382	P/A 2 Coats of Lime Geeru 3 to 6 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth 3 feet to 6 feet.	7.5	EA		0
383	P/A 2 Coats of Lime Geeru above 6Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth above 6 feet.	7.5	EA		0
384	P/A Synthetic Enamel Paint	Providing and applying two coats of synthetic enamel paint of approved make over one coat of primer on structural steel including scaffolding at all height, providing all material for process	7.5	M2		0
385	P/A Acrylic Emulsion Interior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including filling up the crevices, cracks & holes with approved quality of painter#s putty and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (internal quality) of first quality and of approved manufacturers and approved shades.	37.5	M2		0

386	P/A Duco Paint	Prov. & applying duco paint as per following process:- 1) Filling dents and uneveness using wood filler putty and sanding it 180 no. sand paper 2) Applying 1st coat of primer with thinner (1 thinner : 1.5 primer) 3) sanding the surface again and fill the dents using wood filler putty 4) Apply one coat of primer on repaired surface and sand the surface with 220 & 320 no. sand paper 5) Apply 2 coat of duco paint (Duco NC lacquer 1 part: Duco thinner 2 part).	12.5	M2		0
387	P/A Acrylic Emulsion-1 coat interna	Supplying providing and applying to wall with water base acrylic emulsion paint of approved manufacture and of approved colour and shade including scaffolding etc complete as directed by EIC and application as per manufacturer's recommendation, including scaffolding ,cleaning surface etc. Acrylic emulsion paint 1 coat	37.5	M2		0
388	P/A Acrylic Emulsion Exterior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including opening up of crevices, cracks & holes and making v grooves, and filling up with approved quality of crack filler and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (external quality) of first quality and of approved manufacturers and approved shades.	25	M2		0
389	P/A Leafy Aluminum Paint	Providing all necessary tools ,tackles ,preparing the surface by scraping, chipping to remove loose rust, paint, detrimental foreign matter etc. Providing and applying one coat of high build zinc phosphate primer 35 microns DFT. Applying two finish coats of leafy aluminum paint (IS 2339) of 30 microns DFT of each coat complete as directed by EIC at all heights. total thickness of DFT shall not be less than 95 microns	12.5	M2		0
390	P/A Birla White Putty	P/A Birla white putty, Mix Birla white wall care putty with clean water slowly to make paste. Continue the mixing for 10-15 minutes till a uniform paste is formed. Apply the first coat on already moistened wall surface. After drying of first coat of putty just rub the surface gently with west sponge or rub the surface very gently with the putty blade in order to remove the loose particles. Allow the surface to dry for at least 3 hours and then apply second coat.	12.5	M2		0
391	P/A POP Punning	Providing and applying of 4 to 8 mm thick lime pop punning over all types of plastered surfaces of walls ceiling beams columns etc. To bring surface in plumb line and level, including making surface smooth, providing required grooves on top of skirting etc. The cost shall include all labour, materials, scaffolding, protecting adjoining surface, cleaning etc complete.	12.5	M2		0
392	P/A High Build Epoxy Paint	Providing and applying one coat of surface tolerant epoxy primer at 50 microns DFT followed by two finishing coats of high-build coal tar epoxy in recommended DFTs (100 microns DFT per coat) for chequered plates / gratings. Total thickness of DFT shall not be less than 250 microns. Item includes preparing the surface by scraping, sand papering, cleaning, solvent cleaning wherever required to remove oil/grease & painting with two coats of high-build coal tar epoxy in	12.5	M2		0
393	P/A Varnishing	Preparing the surfaces of wood by removing the existing stains, dirt, etc. By sand papering, filling cracks, depressions etc. with approved quality of putty or wax wherever required and as recommended by TPCL engineer and applying coats of French polish.	12.5	M2		0
394	P/A Melamyne Polish	P/A melamyne Polish (Make asian paint or equivalent approved by Tata Power) on wooden surface including all tools ,tackles ,plant, equipment (i) Scrubbing with sand paper (ii) Applying lac polish/spirit and lak dana solution (iii) filling small holes/cracks/scratches making surface even with putty/whiting mix with desired raw/burnt/burnt turkey amber sienna and lac polish (iv) Apply sand paper again on applied putty/whiting for finishing surface (v) Apply 2 coats of polish with buffing	12.5	M2		0

395	P/A PU Polish	Providing all necessary tools tackles services etc. For removing & providing high quality PU polish on door as directed by site engineer. Shade and color of the polish shall be same as previous shade & color.	12.5	M2		0
396	P/A Luminous Paint	Prov. & applying luminous paint of required shade, rate shall be inclusive of scrapping of surface to make it free from dirt, oil and algae, applying one coat of water based primer and two coats of luminous paint	12.5	M2		0
397	Services for Wild Growth Cutting	Providing Services for removal of grass / shrubs (of size up to 3 feet height) by uprooting them or cutting them from base, rate shall be inclusive of man, tools, disposal of wild growth outside tata power premises	62.5	M2		0
398	Services for Weedicide Spraying	Providing & spraying weedicide at switchyards in power house, rate shall be inclusive of material, spraying tools, manpower so as to complete the job. Vendor should submit MSDS of weedicide prior to use on site.	62.5	M2		0
399	Service for Cleaning of Moss	Providing Services for moss removal by spraying bleaching powder over the area, leaving it for 30 minutes and spray water over it	62.5	M2		0
400	Service for Housekeeping	Providing Services for material shifting & cleaning of operational areas as instructed by EIC	100	M2		0
401	Prov.& Supply Red	Supplying natural red soil at site as directed by EIC	5	M3		0
402	Prov. & supply manure	Providing & supplying good cow dung manure, loading & unloading at site etc.	7.5	M3		0
403	Serv. clearing Sewage Line Chockup	Providing Services for completing / attempting choke up clearance in any sewage line by using traditional method of using 8 mm / 10 mm reinforcement bar, pouring in water with pressure as much as possible as instructed by EIC	12.5	M		0
404	Cleaning Septic Tank by suctiontank	Providing Services of municipal corporation suction tank & ite operating team	3	EA		0
405	Serv for Cleaning of Sewage Chamber	Providing Services for cleaning of sewage chamber of all sizes by removing its muck and disposing it away from residential area outside tata power premises	7.5	EA		0
406	Serv for Gravel & Boulders Removal	Providing Services for removal of gravel & boulders filled in transformer foundation or in switch yard ground and shifting within 100 meter lead inside tata power premises	7.5	M3		0
407	Serv for Laying available Gravel	Providing Services & material for laying gravels (50 - 60 mm) in transformer foundation with gravels & boulders (200 - 250 mm) available at site as instructed by EIC	7.5	M3		0
408	Prov. & Laying Gravel in Switchyard	Prov services & material gravel in switch yard of size 50 - 60 mm in layer maximum upto 300 mm depth, rate shall be inclusive of shifting material within 200 meter lead, levelling of surface	7.5	M3		0
409	Prov & Laying Sand Bags	Providing & laying river / sea sand bags (min weight 20 kg per bag), shifting & laying cable trenches	7.5	EA		0
410	Prov. & filling sand in trenches	Providing Services for river / sea sand filling in trenches and levelling, rate shall be inclusive of man, material, shifting of sand upto 100 m lead.	7.5	M3		0
411	Services for removal of Sand Bags	Providing Services of removal of sand bags and shifting it to designated place as instructed by EIC	7.5	EA		0
412	Services for Laying of Sand Bags	Providing Services for laying of existing sand bags, rate shall be inclusive of shifting of sand bags upto lead of 100 m	7.5	EA		0
413	Const. of earth pit 600 x 600	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 600mm x 600mm	7.5	EA		0
414	Const of earth pit 900 x 900	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 900mm x 900mm	7.5	EA		0

415	Const of earth pit 1200 x 1200	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 1200 mm x 1200mm	7.5	EA		0
416	Supplying Marconite rod 100 mm dia	Supplying 3 m long marconite rod by casting marconite compound around 20 mm dia copper rod, rate shall be inclusive of man, material, tools, transportation and installation at site, rod must be free from visible cracks	7.5	EA		0
417	Refurbishment of earth pit 600x600	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 600 mm x 600mm	7.5	EA		0
418	Refurbishment of earthpit 900 x 900	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 900 mm x 900mm	7.5	EA		0
419	Refurbishment of earthpit 1200x1200	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 1200 mm x 1200mm	7.5	EA		0
420	Brazing of Copper Conductor 0.2 mm	Providing all material, tools and tackles, service for brazing of 0.2 copper conductor	7.5	NO		0
421	Laying Copper Conductor 0.2mm	laying copper conductor,0.2mm, providing all tools & tackles for laying conductor in line as directed by EIC	7.5	M		0
422	P/A Acrylic waterproofing	Providing & applying Acrylic waterproofing coat over RCC roof including removing of existing waterpoofing treatment, removing damaged or loose portion of roof substrate, preparing surface free of dirt, oil etc., filling unlevelled surfaces with polymer modified mortar prepared by Dr. Fixit URP & filling surface cracks with Dr.Fixit Crack X, grouting of roof with non shrinkable polymeric grout, then applying primer coat of Dr. Fixit primeseal two coats of Dr. Fixit New coat with fibreglass mat	12.5	M2		0
423	Prov Brick bat coba waterproofing	Providing and laying brickbat coba in sunken portion of WCs, bathrooms, etc., consisting of one part of cement, 2 parts of broken brickbats varying from 12 mm to 25 mm thick and one part of lime mortar to two parts of sand as specified including preparing the surface by applying and grouting a slurry coat of neat cement using 2.75 kg/m2 of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface	12.5	M2		0
424	P/A APP / STP membrane	Providing and applying of Shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application followed by providing and applying of shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application. Top surface : providing and applying silver shield (bituminous aluminum coating) (With 5 year guarantee).	12.5	M2		0

425	Prov china mosiac waterproofing	Providing and laying intenral cement based water proofing treatment with China Mosaic finish including preparation of surface as required for treatment of roofs, balconies, terraces, RC gutters, etc. as per approved mehtodology	12.5	M2		0
426	P/A PVC membrane	Preparation & curing clean the surface & provide geotextile (minimum 300gsm). Provide PVC membrane (made of virgin PVC)alkor bright (minimum 1.5mm thick) over the surface &start placing from lowest point. Unroll the membrane half way align & fix themembrane 1st layer with the help of anchors & aluminium washers & adjacentlayer with hot air welding & applying unifrom pressure by roller/wet cloth toremove entrap air. Membranes to be fixed with aluminium strips at the end aboveparapet wall.	12.5	M2		0
427	Prov. Covering for windows	Providing, fixing & removing plywood (12mm to 20 mm thickness) covers of existing machine units/pump etc. (actual area of openings covered by plywood be measured.)	12.5	M2		0
428	Removal of loose concrete	Providing services for chipping of loose concrete from beams, columns, slabs & all other concrete surfaces to expose sound concrete beneath using light chisel & hammer & also preparing concrete surface to receive further treatment, disposing the debris as directed	12.5	M2		0
429	Removal of rust	Providing services for cleaning reinforcement of total rust by tapping or using wire brush or any other suitable way including from behind and around the reinforcement bars to give it a totally rust free finished steel surface. Measurement shall be on basis of repair surface area. Providing and applying approved chemical rust remover with paint brush and removing loose particles after 24 hours of its application. Measurement shall be on basis of repaired surface area	10	M2		0
430	corrosion inhibitor	Providing & applying corrosion inhibitor, the exposed reinforcing bars shall be cleaned thoroughly to remove corrosion scales using buffing wheel and emery cloth. The exposed surface shall be washed with water jet followed by applying two coats of anticorrosive chemical of approved brand on cleaned rebars as per manufacturers specification and directions of engineer-in-charge. (surface area of concrete treated will be measured for payment)	10	M2		0
431	Corrosion treatment	Corrosion Treatment :- Removing existing corrosion by means of mechanical wire brush on exposed surfaces of reinforcement, providing and applying Alkaline based Rust Converter RUST GUARD in single coat over the exposed rusted reinforcement as per the manufacturer specifications and instructions. Providing and Applying two coats of Zinc rich Primer on re-inforcement , STEEL GUARD at all heights etc complete.	10	M2		0
432	Treatment for separation cracks	Treatment For Separation Cracks :- Opening up the junction of brick work and beam / column, sealing the junction by metal packing/filling by polymer mortar, then overlaying the joints / crack by approved fibre sheet (strip) approx 200mm wide, applying bond coat of approved polymeric slurry before and after the fibre sheet is fixed over the joint (junction / crack) etc complete.	10	M		0
433	Crack filling	Providing material & treating cracks by filling , Cleaning the crack surface with the help of clean water, drying the surface in natural sun, providing & applying the bonding coat, providing & fixing fiber cloth 25mm to 50 mm width, filling the same with polymer putty, providing & applying 2 coats of acrylic polymer to that width of the surface cure natural for 24 hrs. etc.	10	M		0
434	Crack filling using polymer plaster	Carefully opening the cracks in plaster, cleaning the cracks with electrical air blower/water & filling the cracks with polymer modified cementitious mortar in proportion 1:5:15 (i.e. Polymer: cement: well graded quartz sand by wt.) including polymer bonding coat & seal coat, curing etc. complete. (Note: Width of cracks upto 6 mm and depth upto 20mm.)	10	M		0

435	PU sealant	Cleaning & filling the joints/gaps between the window with the help of PU Sealant of approved make etc complete in all respect from the both sides.	10	M		0
436	Epoxy bond coat	Providing and applying bond coat on the prepared surface to receive new polymer mortar/polymer modified concrete, with two components epoxy based bonding coat concresive 1414 of BASF/Nitobond ep of FISROC/ Fitbond EA of Conmix or equivalent material in one full coat. Laying of reinstatement polymer mortar or micro concrete shall be completed within the overlay time of bonding coat. Item rate inclusive of all man, material, transportation, tool etc.	10	M2		0
437	P/A Polymer plaster	Providing and applying of polymer modified mortar single component, alkaline resistant fibre reinforced, duel shrinkage-compensated, thixotropic, cementitious patch repair mortar as suitable material and finishing with trowel carefully compacting the same around the rebar's and finishing to bring it in line with existing concrete surface on the columns, beams & slabs etc., 25 mm thick polymer / latex modified mortar plaster	10	M2		0
438	P/L Micro concrete	Providing and laying of micro concrete, approved brand in proportion 1:1 with metal no.1 including mixing, waterproof shuttering, pouring, consolidating, scaffolding, curing as per MFG specifications, transportation at site, identification of leakage source, including dewatering of pits whenever required till completion of job etc complete as directed. (Measurement will be taken on consumption of micro concrete only, metal/aggregate will not be measured separately.)	10	KG		0
439	P/A prodecoat 0770	Providing and applying Prodecoat 0770 as per following methodology 1. Cleaning entire surface with high pressure water jet pump 2. Allow surface to dry 3. Open visible cracks in 5 mm * 5 mm width & depth. 4. Apply one coat of POLYSEAL-0724 in the opened cracks uniformly. 5. Allow it to dry for 4 Hours. 6. Fill the cracks with polymer sealant AQAUASEAL 7. Apply first coat of PRODECOAT- 0770 uniformly with brush or roller 8. Allow it dry for 60 minutes 9. Apply second coat of PRODECOAT-0770	10	M2		0
440	P/A Elastomeric paint	Providing & applying one coat of primer and two coats of elastomeric paint having an sel elangation upto 200 % applied to the surface at interval of not less than 6 hours to the approved shade and colour etc. complete. RAINGUARD .(,Providing & applying two coats of Elastomeric coating having 200-300% elongation over a coat of primer over properly prepared plaster surface including scrapping all loose material on existing plastered surface etc complete as directed.)	10	M2		0
441	FST 250	Providing & applying Expanded Foam (FST-Foam Duct Sealant 250) including Cartridge Set with Mixing Nozzle for any cable entry points gap filling work as directed by TATA power Engineer. The rate shall includes the cost of materials & associated equipments required for the job.	10	EA		0
442	Providing Service F/Hiring JCB	Hiring of JCB with fuel, operator and carrying out work as directed for 8 hours shift	2.5	SFT		0
443	Providing services of Crane 90 Ton	Providing service of 90 ton crane meeting all the requirement of tata power safety norm, rate should be quoted for 8 hr shift	1	SFT		0
444	Prov Services of Compressor Breaker	Prov. Services of compressor / tractor breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours shift	2.5	SFT		0
445	Prov. Services of JCB Breaker	Prov. Services of JCB breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours shift	2.5	SFT		0

446	Providing services of Ferrana	Providing service for hiring of Ferrana meeting all the requirement of Tata power safety norm, rate should be quoted for 8 hrs shift	5	SFT		0
447	Service for Hiring Tempo 10kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10 kms)	5	SFT		0
448	Service for Hiring Tempo 20kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20 kms)	5	SFT		0
449	Service for Hiring Tempo 30kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30 kms)	5	SFT		0
450	Services for Hiring Tempo 30-50 Kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50 kms)	5	SFT		0
451	Services for hiring Tata 407 10 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10 kms)	5	SFT		0
452	Services for hiring Tata 407 20 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20 kms)	5	SFT		0
453	Services for hiring Tata 407 30 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30 kms)	5	SFT		0
454	Serv. for hiring Tata 407 30-50 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50 kms)	5	SFT		0
455	Providing Concrete Pump	Prov. Services of concrete pump for grade up to M30 and distance up to 20 meter / height up to 10 meter	2.5	SFT		0
456	Providing 60 ft Manlifter(8 Hours)	Prov. Services of manlifter up to 60 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
457	Providing 60 ft Manlifter(4 Hours)	Prov. Services of manlifter up to 60 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
458	Providing 80 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 80 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
459	Providing 80 Ft Manlifter(4 Hours)	Prov. Services of manlifter up to 80 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
460	Providing 100 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 100 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
461	Providing 120 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 120 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
462	Providing 150 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 150 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	2.5	SFT		0
463	Prov. Diesel Operated Pump 2 HP	Prov. 2 HP submersible pump for dewatering of pits or other excavated space including diesel, transportation and operator service	2.5	SFT		0
464	P/F Scaffolding upto 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards upto 5 m height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of elevation	12.5	M2		0

465	P/F Scaffolding Above 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards from 5 m & above height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of	12.5	M2		0
466	P/F Scaffolding at all Height	Providing and fixing of tubular h-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, as per Tata power standards including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of elevation	12.5	M3		0
467	Water Supply - Potable	Supplying potable water by tanker, rate shall be inclusive of pumping water up to 8 m height as and	12.5	KL		0
468	Water Supply - Boring	Supplying potable water tanker to ground level or below storage tank	12.5	KL		0
469	MAK&CUT CORE IN RCC WALL/SLAB,250MM	MAK&CUT CORE IN RCC WALL/SLAB,250MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of 160-200 mm diameter.	50	No		0
470	MAK&CUT CORE IN RCC WALL/SLAB,150MM	MAK&CUT CORE IN RCC WALL/SLAB,150MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of upto 100 diameter.	50	No		0
471	WPC Board	WPC board, Providing and fixing of WPC board, providing all equipment, material, tools, tackles etc for replacing and fixing panneling at all height.as directed by engineer in charge and approved from architect	75	M2		0
472	providing and fixing of Artifical green	providing and fixing of Artifical green turf wall cladding panels of make Glo panels. Quote shall include require ply backing, adhesives, tool, tackels etc required to complet the job in all respect. It will be prefered if the material used is LEED or IGBC certified	100	M2		0
473	P/F awning	providing and fixing AWNING of fix type including all necessary supports and fixing at site, stable outdoor weather proof inclduing trasportationat site, fixing at height with fixrures and fastening etc complete as directed.	75	M2		0
474	CISE,P/F services for Awning cloth repla	Providing & replacing the existing Awning cloth with new approved make cloth. Vendor should submit catalogue and take approval from Site In charge before procurement of the cloth. Rate shall include all tools, tackles, transportation, scaffolding, etc. required to carry out the works as directed by Site In Charge.	100	M2		0
475	PRVDNG&FIXING,VINYL FLOORING	SERVICE TYPE: PROVIDING AND FIXING OF VINYL FLOORING, MATERIAL: POLY VINYL CHLORIDE OF APPROPRIATE BY MIN THICK: 2 MM OF APPROVED QUALITY AND SHADE INCLUDING LEVELLING, CLEANING OF FLOOR SURFACE, LEVELLING WITH POP IF REQUIRED AND FIXING WITH RUBBER ADHESIVE AS PER MANUFACTURE SPECIFICATIONS INCLUDING CLEANING OF THE SURFACE AND HANDING OVER TO TATA POWER CO, APPROVAL SHALL BE TAKEN FOR SHADE AND THICKNESS OF VINYL FLOORING, CUTOUTS/OPENING WILL BE DEDUCTED	100	M2		0
						0
						0
						0

Total for Civil maintenance work at Operational and Non-operational area	**0**

Civil Maintenance Works- Transmission Division- Panvel Circle, Kalyan Node.						
Sr. No	Short Text	Description	Quantity for 1st year	UOM	1st Year	
					Rate (INR)	Amount(INR)
A. Civil Work in Non Operational Area						
1	Excavation 0-1.5 m, disposal inside	Excavation in all types of ordinary soils including dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 0 to 1.5 mtrs deep within basic lead of 100 mtr (rate does not include payment against royalty and debris management cell charges)	4	M3		0
2	Excavation 0-1.5 m disposal outside	Excavation from 0 to 1.5 meter in all types of ordinary soils (natural / backfilled) including dewatering and depositing / stacking of all materials, removal of wild growth vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth material to authorized dumping sites outside owner#s premises.	4	M3		0
3	Excavation 1.5-3 m, Disposal inside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials, removal of vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs and unloading the excavated material to authorized dumping sites inside owner#s premises.	2.4	M3		0
4	Excavation 1.5-3 m Disposal outside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs deep, rate shall be inclusive of dispoing surplus material to authorized dumping sites outside owner's premises.	2.4	M3		0
5	Collector permission for excavation	Obtaining collector permission for excavation for which tata power will provide the available documents. Official payment will be done by tata power on receipt demand note	5	M3		0
6	Excavn. in hard rock by JCB breaker	Prov. Services for excavation in hard rock using JCB breaker as directed by EIC and disposing debris outside tata power premises at authorized site outside owner's premises	2.4	M3		0
7	Prov. Cartage services	Providing cartage service & transporting, excavated soil, debris, bricks, concrete, dry garbage etc.and disposing off to municipal corporation area approved dumping sites outside premises incl submission of relevant documents. Note: measurement will be made on truck measurement.	5	M3		0
8	Backfilling with site material	Providing services for backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer with local earth available at	5	M3		0
9	Supplying & filling with murrum	Supplying good quality murrum free from gravels & boulders, backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer, excluding use of JCB as per instruction of EIC	5	M3		0
10	P/L dry rubble soling	Providing and laying dry rubble soling of basalt stone or black trap stone or locally available strong stones with approved quality stones including filling gaps with small chips ramming with hand rammer etc.	5	M3		0
11	Rubble soling with site material	Laying of rubble soling with material available at site within 50 m lead, rate shall be inclusive of man, shifting of material manually, laying as per line & level, filling interstices with small chips and laying layer of crushed sand or good quality murrum	5	M3		0

12	Demolishing brick masonry	Providing all necessary tools tackles services etc for demolishing brick masonry of variable thickness with plaster and disposing off the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	2.4	M3		0
13	Breaking PCC	Providing all necessary tools tackles services etc for demolishing PCC and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer., rate shall be inclusive of storing debris up to 200 m lead until taken for disposal	2.4	M3		0
14	Breaking pointing	Providing all necessary tools tackles services etc for breaking pointing and disposing of the debris to the approved dumping ground of municipal corporation area / outside owner premises etc complete as per specifications and as directed by the engineer	2.4	M3		0
15	Demolishing RCC	Providing all necessary tools tackles services etc for demolishing all types of RCC structures at floor level manually or by means of chipper breaker (exclusive of air compressor breaker / JCB breaker / Poclain breaker) including transportation of debris, cutting of reinforcement, disposing salable scrap material to the tata power stores etc. Complete as per the requirement of drawing and as directed by the site-engineer and disposing of the debris to the outside company premises etc complete	2.4	M3		0
16	Breaking cement / lime plaster	Providing all necessary tool tackles services etc for breaking plaster of all thicknesses as directed by the site-engineer and disposing of the debris to the approved dumping ground of municipal corporation outside company premises etc complete as per specifications and as directed by the engineer	4	M2		0
17	Breaking of asphalt road (BC & DBM)	Providing all necessary tools tackles services etc for breaking asphalt road and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	4	M3		0
18	Breaking asphalt road incl. macadam	Providing all necessary tools tackles services etc for breaking asphalt road including macadam layer, soling etc. (all thickness) and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.,asphalt road including metalling, soling etc. (all thickness)	4	M3		0
19	Dismantling structural steel	Providing all necessary tools tackles & services for dismantling structural steel sections i.e. Angles / channels / beams / plates etc (not inclusive of ferrana / crane) & returning the same to nearest tata power stores or designated place etc complete as directed	2	MT		0
20	Removing Door / windows / louvers	Providing all necessary tools tackles services etc for removing all type of doors/windows in good condition & returning to the nearest tata power stores with necessary documentation etc. Complete as directed by the engineer	4	M2		0
21	Removing chainlink fencing	Providing services for removal of chain-link fencing including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever	25	M2		0
22	Removing Barbed wire	Providing services for removal of Barbed wire including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever	30	M		0

23	Removing concertina coil	Providing services for removal of concertina coil including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever	30	M		0
24	REMOVING OF AC/GI/FRP SHEET	Providing all necessary tools tackles & services for removing old AC / GI / FRP sheets from existing shed or boundary & returning to the tata power stores etc complete as directed	30	M2		0
25	Breaking of tile work	Providing all necessary tools tackles services etc for breaking of flooring & dado tiles as directed by the site-engineer and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.	7.4	M2		0
26	DISMANTLING PARTITION	Providing services for dismantling aluminum / wooden / annealed glass / toughen glass partition at all heights & depositing it to tata power stores or scrap yard as directed by engineer	7.4	M2		0
27	Dismantling Gypsum Partition	Providing services for dismantling gypsum board partition at all heights including support structure & depositing it to tata power stores or scrap yard as directed by engineer	7.4	M2		0
28	Removing False ceiling incl support	Providing services for dismantling grid type / gypsum false ceiling including supporting arrangement, depositing saleable scrap to tata power stores & disposing remaining debris outside tata power premises at own risk.	7.4	M2		0
29	Dismantling false ceiling	Providing services for dismantling of false ceiling (grid & board type) excluding supports and disposing it outside tata power premises	7.5	M2		0
30	Dismantling of false flooring	Providing services for dismantling of false flooring including supporting arrangement using required tools and tackles and shifting it to tata power scrap yard	5	M2		0
31	DISMANTLING CONCEALED PLUMBING LINE	Providing services for dismantling concealed plumbing line of any dia, by breaking tile / plaster as required, depositing wastage to stores or as directed by EIC / reusing it at site	4	M		0
32	Removing PVC pipe line	Providing services for wall mounted / concealed sewage / drainage line, disposing material outside Tata power premises at approved dumping ground	5	M		0
33	Removing EWC	Providing services for removing floor mounted / wall mounted EWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit	1	EA		0
34	Removing IWC	Prov. Services for removing IWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	1	EA		0
35	Removing wash basin	Prov. Services for removing counter top / wall mounted wash basin of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at	1	EA		0
36	Removing urinal	Prov. Services for removal of urinal and disposing it to outside tata power premises	1.5	EA		0
37	Removal of roller / vertical blinds	Prov. Services for removal of roller blind / venetian blind / vertical blind. Blinds must be removed with support channel & must stored in condition that it can be reused in as it is condition	5	M2		0
38	Demolishing kadappa / granite	Providing services for dismantling stone work such as kadappa / granite / marble or similar stone except kota, rate shall be inclusive of removal of mortar bedding if laid on kitchen platform & disposing outside tata power premises at designated local municipal authority dumping ground	7.5	M2		0

39	Dismantling railing	Providing servcies for dismantling any type of railing (SS / MS / GI ; single rail or double rail) and disposing it to tata power stores, rate shall be inclusive of man, material, tools such as gas cutting set / grinder cutter, shifting to stores so as to complete the job	2.5	M		0
40	Dismantling rolling shutter	Prov. Services for dismantling rolling shutter of any height & width including disposing it to tata power stores, payment for scaffolding to be paid extra if done more than 2 meter high	4	M2		0
41	Dismantling MS gate	Removing any type of ms gate and disposing it to stores scrap yard within 200 meter lead	4	M2		0
42	Removing & disposing paver block	Removal of existing paver blocks 60 - 80 mm thick & sand bedding and disposing outside tata power premises at designated local municipal authority	4	M2		0
43	Removing & stacking paver block	Removal of existing paver blocks 60 - 80 mm thick including sand bedding and stacking in owner premises within 200 meter lead	4	M2		0
44	Replacement of trench cover	Prov. Services for removal of existing trench cover and laying new trench cover, rate shall be inclusive of man, material, tools for replacement of trench cover but excluding of casting trench cover	5	EA		0
45	Prov. & laying PCC M-10	Supplying, providing and laying in position M - 10 plain cement concrete in levelling course/fill under or around foundations pits. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix	2.5	M3		0
46	Prov. & laying PCC M-15 (site mix)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix /	0.6	M3		0
47	Prov. & laying PCC M-15 (RMC)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	6	M3		0
48	Prov. & laying PCC M-20 (site mix)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using	6	M3		0
49	Prov. & laying PCC M-20 (RMC)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: RMC	4	M3		0
50	Prov. & laying PCC M-25 (site mix)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mixer	6	M3		0
51	Prov. & laying PCC M-25 (RMC)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	6	M3		0

52	Prov. & replacing, precast RCC, M25	Providing and replacing of precast reinforced cement concrete structure, grade: M25, max w/c ratio: 0.5, rate to include shuttering, vibrating, machine mixing, providing lifting arrangement, placing insert curing handling, transporting with down graded aggregate: 20 mm	5	M3		0
53	Prov. & laying PCC M-30 (RMC)	Supplying, providing and placing in position reinforced cement concrete of grade M30 with 20mm down graded aggregate for works below grade levels including vibrating, curing, de-watering wherever necessary, providing construction joints, leaving cut outs / pockets, placing of inserts/ embedment, etc., complete, including cost of providing, fixing and removing form work for all shapes (including scaffolding, centering etc) but excluding cost of providing reinforcement as directed by the engineer	4	M3		0
54	P/ L M-25 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M25 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	2.5	M3		0
55	P/ L M-20 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M20 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	2.5	M3		0
56	Prov. & laying plum concrete M - 15	Providing and placing in position plum concrete of required thickness, at all depths with 33% boulders of size 150mm to 230mm and 67% ready mix concrete of M15 grade including shuttering, vibrating, compacting, curing, dewatering, levelling, finishing, removal of formwork, etc. Complete as per specifications/drawings and as directed by the	2.5	M3		0
57	Prvov. & const. Brick masonry 230mm	Providing all material and constructing brick masonry 230mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	2.5	M3		0
58	Prov. & const Brick Masonry 115mm	Providing all material and constructing brick masonry 115mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	2.5	M2		0
59	P/L uncoursed rubble masonry	Supplying, providing and laying, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer.	2.5	M3		0
60	Laying UCR masonry - rubble at site	Prov. Services for laying including tools tackles, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer., rubble to be brought from 50 m lead	2.5	M3		0
61	P/L pitching stone work	Providing all material for dry stone pitching : providing all the materials and laying 225 mm thick. Dry rubble pitching at all heights to correct line and level dry stone pitching with individual stones of 22 cm depth and minimum size 0.014cum. Complete with all leads and lifts for all materials and machinery including all charges and as directed by engineer-in-	2.5	M2		0
62	CLC/AAC/Siporex block masonry - 4"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness - 100 mm)	2.5	M2		0

63	CLC/AAC/Siporex block masonry - 8"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness # 200 mm)	2.5	M2		0
64	Making pocket, 300x300x150mm	Making of pocket, size:300 x 300 x 150 mm, at all levels with staging including grouting with cm 1:3 in concrete/masonry, debris must be disposed outside owner's premises at municipal corporation approved dumping yard	2.5	EA		0
65	P/A Internal plaster 12 mm	Providing 12mm. Thick smooth finished cement plaster in cement mortar (1:3) for RCC, brick work, sides and undersides of the slabs, canopies, chajjas with drip molding etc. Including scaffolding, curing, etc. Complete as per specifications.	5	M2		0
66	P/A external plaster 20mm	Providing all materials and carrying out sand faced plaster 20 mm thick in two layers (first layer of 14 mm and second layer of 6 mm thickness) with waterproofing compound. Including bands drip molds in cement mortar 1:4 including scaffolding (the rates shall include provision for chicken mesh 230 mm wide at the junction of masonry with RCC).	5	M2		0
67	P/A ready mix plaster - 20 mm	Prov. & applying ready mix plaster of Godrej make tuff Duro Plast / ACC make Suraksha ready to use plaster 101 or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, application and finishing of surface, curing	5	M2		0
68	P/A Raised or flush cement pointing	Providing all the materials and carrying out raised or flush cement pointing in 1:3 cement mortar including providing and erecting steel scaffolding (up to 2 meter), curing, edge finishing	5	M2		0
69	P/L IPS flooring- 75 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete including as per line & level required, finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 75 mm thick	5	M2		0
70	P/L IPS flooring- 50 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete as per line & level required, including finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 50 mm thick	5	M2		0
71	P/L floor tiles (800 x 800)	Providing and fixing 800 x 800 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and jointed with tile grout of ROFF / equivalent make, cutting of tiles to required size, cleaning, curing, etc. Complete.	2.5	M2		0
72	P/L floor tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and filling joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	7.5	M2		0
73	P/L wall tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning,	4	M2		0
74	P/L wall tiles (300 x 600)	Providing and fixing 300 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning,	2.5	M2		0
75	P/L acid resistant tiles	Providing all materials, tools, tackles & services for supplying & fixing acid resistant tiles. Scope includes 1) applying epoxy primer & allow it dry for 24 hr. 2) fixing the tiles by applying 5-8 mm thick paste made up from mixture of VIKO proof-SDK cement powder or equivalent sodium silicate cement powder & VIKO proof-SDK liquid binder or equivalent liquid binder in proportion of 1:3. 3) joints & gaps to be filled with VIKO proof ep-epoxy resin cement or equivalent acid resistant cement.	5	M2		0

76	P/L tile on existing tile-vitrified	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive up to 10 mm thick layer for vitrified tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent	2.5	M2		0
77	P/L tile on existing tile (ceramic)	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive upto 10 mm thickness for ceramic tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent	2.5	M2		0
78	P/F kota stone ,25mm thick	Providing and fixing at least 25 mm thick machine cut machine cut kota stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	6.5	M2		0
79	P/F white marble,15mm	Providing and fixing at least 15 mm thick machine cut machine cut white spotless marble stone of any sizes for windows / door jambs / lintel / sill with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	2.5	M2		0
80	P/F black granite stone,15mm	Providing and fixing at least 15 mm thick machine cut machine polished pitch black granite stone of any sizes for counter / cooking/platform with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, full bull nose or double bull nose molding & polishing of edges & redoing in cm	2.5	M2		0
81	P/F Baroda green stone 15 mm	Providing and fixing at least 15 mm thick machine cut machine cut Baroda green stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	2.5	M2		0
82	Mirror polishing of kota/mosaic	P/s for mirror polishing of kota / mosiac flooring preceded by machine polish to bring level on joints and edges if required	4	M2		0
83	P/L Granite for sill / staircase	Providing and fixing 15 mm thick black granite on window sill, staircase tread & riser, 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of marble, raking and finishing the joints with silicon sealant, curing, rubbing, polishing and cleaning complete at all levels 2nos in steps with minimum 50mm overlapping and maximum of 300mm width in combination.	2.5	M		0
84	Edge molding	Prov. Services for molding of edge - bull nose or demi bull nose for all type of stones	2.5	M		0
85	P/F Paver block - 60 mm	Providing and fixing interlocking concrete paver blocks of 60mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties,	2.5	M2		0

86	P/F paver block - 80 mm	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties,	2.5	M2		0
87	Lay paver block available at site	Prov. Services for laying paver blocks available at site within 50 meter lead, rate shall be inclusive of shifting or transporting for given lead, 40 mm thick sand bedding, filling joints with sand	2.5	M2		0
88	P/F M 30 - 100 mm paver block	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties,	2.5	M2		0
89	Prov. & fixing kerb stone M 20	Prov. & fixing kerb stone of size 150 x 300 mm made of M20 grade of concrete conforming to is 5758 (1994) (type 1d), rate shall be inclusive of man, material, transportation, hacking / breaking of PCC / asphalt, laying mortar (1:1) bedding to line and level, cutting / breaking of kerb stone to size and finishing joints with neat cement, housekeeping and disposal of debris outside tata power premises	2.5	M		0
90	P/L paver tile 20 mm	Prov. & laying 20 mm thick paver tile of M 20 grade on average sand bedding of 50 mm thickness to the line and level, rate shall be inclusive of man, material, transportation, tools, joint filling with sand so as to complete the job	2.5	M2		0
91	Sup/Fab/Placing Reinforcement Steel	Providing & binding reinforcement steel of any dia including binding wires, cleaning, bending, cutting, hoisting, placing in position, lapping and binding with 16 SWG annealed soft iron wire or tack welding reinforcement steel for all types of RCC work irrespective of locations & levels all as per drawings including handling and transporting steel from nearest stores to site complete as directed for HYSD bars.(FE-500 conforming to IS code 1786-1985).	1	MT		0
92	Fab & Erect Structural Steel Work	Fab & erection all types of mild steel, work at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel	1.5	MT		0
93	Prov./ Supply /Fab structural steel	Providing & fabricating & erecting all types of structural steel, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of	2.5	MT		0
94	Fab & Erect GI Work	Fab & erection all types of GI work, at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel	0.5	MT		0

95	Prov/Supply/Fab Structural Steel#GI	Providing & fabricating & erecting all types of GI material, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of	1	MT		0
96	P/F 16 SWG SS Wire Mesh	Providing all tools, tackles, materials for fixing of 16 SWG SS wire mesh of opening size 12.5 mm x 12.5 mm fixed with 12 mm U bolts as mentioned in the drawing or as directed by EIC at any height incl scaffolding, ladder, machinery etc.	2.5	M2		0
97	P/F/E Structural Steel(Tube & pipe)	Providing & fabricating & erecting all types of MS tubes & pipes, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of	0.5	TO		0
98	P/F MS Chequered Plate - 6 mm	Providing & fabricating & placing MS chequered plate - 6 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of	2.5	M2		0
99	P/F MS Chequered Plate - 8 mm	Providing & fabricating & placing MS chequered plate - 8 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of	5	M2		0
100	P/F MS Chequered Plate - 10 mm	Providing & fabricating & placing MS chequered plate - 10 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of	5	M2		0
101	P/F MS Grill	Providing, fabricating and erecting MS grills consisting of 12mm square rods with external frame of 20x6mm flats with safety flip door including applying one coat of primer & 2 coats of enamel paint to all the exposed surfaces of steel. Design will be as per AOC palette. All the required steel will be supplied by contractor. Contractor shall use his own welding set, gas cutting set with accessories, gas and electrodes to complete the entire work, as per the direction etc complete	2.5	M2		0
102	P/F GI Grating	Supplying and laying of grating, material: hot dip galvanized iron and providing all necessary material, tools, tackles & services, outer frame plate size: 40 x 6mm, short span plate size: 40 x 5 mm, bracing plate size: 40 x 5 mm and spacing of plate size: 40 mm	2.5	MT		0
103	P/F/E Al Chequered Plate 8 mm	Providing & fixing aluminum chequered plate of 8 mm thick with lifting arrangement cut provided as directed by EIC,	2.5	M2		0
104	P/F/E Al Chequered Plate 10 mm	Providing & fixing aluminum chequered plate of 10 mm thick with lifting arrangement cut provided as directed by EIC,	2.5	M2		0

105	P/F/E GI Tubular Handrail 2 Rail	Supplying, fabricating & erecting C class GI tubular h&railing of 32 mm dia. Nb medium class, consisting of double GI rail with top GI rail 1 mtr above floor level, mid rail at 600 mm from floor & pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary bends, GI tee joints, GI fixtures, GI fittings, 100 mm x 6 mm toe guard including applying one coat of primer & two coats of synthetic enamel excluding anchor fastener	2.5	M		0
106	P/F/E Single Rail C Class GI Pipe	Providing & fixing single handrail of C class GI pipe of 32 mm dia and connecting with wall with all necessary GI bends, GI tee joints, GI fixtures such as plate for connection at wall, the assembly should be sturdy and with smooth surfaces at joints/ junctions.	2.5	M		0
107	P/F/E Tubular Handrail - SS 2 Rail	SS pipes 304 mat finish /brush steel finish ss tabular handrailing consisting of double SS rail with top SS rail 1 mtr above floor level and pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary SS bends, SS tee joints, SS fixtures, SS fittings,100 mm x 6 mm ss toe guard excluding anchor fastener as directed as directed by engineer	2.5	M		0
108	P/F/E Tubular Handrail - SS 1 Rail	SS pipes 304 mat finish /brush steel finish consisting of one SS rail and connecting with wall with all necessary SS bends, SS tee joints, SS fixtures, SS fittings, the assembly should be sturdy and with smooth surfaces at joints/ junctions. All SS sections, pipes etc to be supported with documents for the quality	2.5	M		0
109	P/F/E SS Hand Rail - 4 Rail	Providing & fixing SS hand rail made of SS 304 satin finish of 1.5 mm thickness, with top rail of SS hollow pipe 50 mm dia and bottom 3 made of SS hollow pipe of 25 mm dia, supported by 50 mm dia @ 1.2 m c/c using bracket as per AOC palette, including cutting, bend, finishing of joints & bends, installation using required screws so as to complete the job	2.5	M		0
110	P/F/E MS Gate - Chainlink	Providing & fabrication of MS gate in single / double leaf with ISA 65 x 65 x 6 mm angle frame, both side MS flat of 10 mm x 6 mm to hold chainlink, 9 gauge chainlink within frame and painted by 2 coats of synthetic enamel preceded by red oxide primer, including hinges, MS aldrop, welding, gas cutting,	2.5	M2		0
111	P/F/E Square Pipe MS Gate	Providing ,fabricating & erecting in position gate made of hollow box section as per the approved drawing using steel confirming to IS 2062/IS:1161 including supply of all materials such as hinges, locking arrangement, plunger bolts, SS wheels & fixtures, MS flat plate for wheels with anchors, making of wicket gate ,vision panel etc incl. of 2 coats of synthetic enamel paint with one coat of primer. (outer frame 90 x 60 x 3 mm, inner pipes - 25 x 25 x 3 mm, 3 nos. 100	1.25	M2		0
112	P/F/E 3mm Thick GI Perforated Sheet	Providing & fixing 3 mm thick GI perforated sheet with 50% opening holes, rate shall be inclusive of man, material, transportation, installation of sheet using tack weld or nut bolt as per site requirements, wastage and fixing sheet to line, level and alignment	2.5	M2		0
113	P/F pin type Anchor Fastener,16mm	Providing & fixing 16 mm dia, 100 mm long pin type anchor fasteners, including drilling the holes (other than HILTI)	7.5	NO		0
114	Anchor Fastener-HILTI HSA 12X100 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 100, rate shall be inclusive of drilling & fixing	2.5	NO		0
115	Anchor Fastener-HILTI HSA 12X145 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 145, rate shall be inclusive of drilling & fixing	2.5	NO		0
116	Anchor Fastener-HILTI HSA 12X175 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 175, rate shall be inclusive of drilling & fixing	2.5	NO		0
117	Anchor Fastener-HILTI HSA 16X102 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 102, rate shall be inclusive of drilling & fixing	2.5	NO		0
118	Anchor Fastener-HILTI HSA 16X137 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 137, rate shall be inclusive of drilling & fixing	2.5	NO		0
119	Anchor Fastener-HILTI HSA 16X182 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 182, rate shall be inclusive of drilling & fixing	2.5	NO		0
120	Anchor Fastener-HILTI HST2-R 12x105	Providing & fixing HILTI make anchor fastener HST2-R 12 x 105, rate shall be inclusive of drilling & fixing	2.5	NO		0
121	Anchor Fastener-HILTI HST2-R 12x145	Providing & fixing HILTI make anchor fastener HST2-R 12 x 145, rate shall be inclusive of drilling & fixing	2.5	NO		0

122	Anchor Fastener-HILTI HST2-R 16x140	Providing & fixing HILTI make anchor fastener HST2-R 16 x 140, rate shall be inclusive of drilling & fixing	2.5	NO		0
123	Anchor Fastener-HILTI HST2-R 16x170	Providing & fixing HILTI make anchor fastener HST2-R 16 x 170, rate shall be inclusive of drilling & fixing	2.5	NO		0
124	P/L Manhole Cover (LD 2.5) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	0.7	EA		0
125	P/L Manhole Cover (LD 2.5) 450X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 450 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	0.7	EA		0
126	P/L Manhole Cover (MD - 10) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (medium duty 10 category), rate shall be inclusive of man, material, transportation and placing along with ring and	0.7	EA		0
127	P/L Manhole Cover (HD - 20) 900X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 900 x 450 (heavy duty 20 category), rate shall be inclusive of man, material, transportation and placing along with ring and	0.7	EA		0
128	P/L Manhole Cover 300 X 300	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 300 x 300 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	0.7	EA		0
129	Replacement of Hinge of MS Gate 6"	Providing & replacing of hinge of gate, material: 6 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by enGIneer incharge.	1.5	EA		0
130	Replacement of Hinge of MS Gate 4"	Providing & replacing of hinge of gate, material: 4 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by engineer in charge.	1.5	EA		0
131	Ser. F/Greasing - Rolling Shutter	Providing material, labor and service for oiling and greasing of shutter, rates are inclusive of providing scaffolding	1	M2		0
132	Making Wicked Gate - Rolling Shutter	Providing all tools and tackles for making wicked gate in existing shutter at all levels and height, rate is inclusive of cutting, welding, all required material and	0.6	M2		0
133	Repairing Gear Operator Shutter	Repairing steel rolling shutters of gear operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc. Complete.	1	M2		0
134	Repairing Hand Operator Shutter	Repairing steel rolling shutters of hand operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc. Complete.	1	M2		0
135	P/F Rolling Shutter Motor - 1 KV	Providing and fixing of electric motor of set 1KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	0.5	EA		0
136	P/F Rolling Shutter Motor - 1.5 KV	Providing and fixing of electric motor of set 1.5 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall include loading ,transportation and unloading of materials at site or as directed by EIC	0.5	EA		0
137	P/F Rolling Shutter Motor - 2 KV	Providing and fixing of electric motor of set 2 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	0.5	EA		0

138	P/F Rolling Shutter	Providing and fixing mechanically operated rolling steel shutters fabricated from 18G GI sheets with slide guides, bottom rail, brackets, door suspension shaft, housing box at operation arrangement, lock plates, locking arrangement, fixing bolts, pulling handles, hood, rolling arrangement & 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. wicket gate shall be paid under separate item, in that case area of wicket gate shall be deducted from this item for payment.	1	M2		0
139	Ser. for fab work- incl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, gas cutting set including gas consumption, all tools and tackles required for performing the fabrication job	0.5	DAY		0
140	Ser. for fab work- excl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, manpower, all tools and tackles required for performing the fabrication job	0.5	DAY		0
141	P/F/E Tray C- 150 Mm	Providing, fabricating and erecting of tray c shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 150 mm	2.5	M		0
142	P/F/E Tray C- 300 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 300 mm	2.5	M		0
143	P/F/E Tray C- 450 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 450 mm	2.5	M		0
144	P/F/E Tray C- 600 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 600 mm	2.5	M		0
145	Serv. Stretching chainlink fencing	Providing Services for stretching chain link fencing at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the	5	M2		0
146	Serv. for Stretching barbed wire	Providing Services for stretching barbed wire at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the	15	M		0
147	Serv for stretching concertina coil	Providing Services for stretching concertina coil at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the	5	M		0
148	P/S GI chainlink fencing- 8 gauge	Providing & stretching GI chain link fencing of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter, including one coat of zinc primer and followed by two coats of synthetic enamel	5	M2		0
149	Prov./strech PVC coated chainlink	Providing & stretching PVC coated chain link fencing of bare GI chain link of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter	5	M2		0

150	Providing & fixing barbed wire	Providing & stretching IOWA type GI barbed wire conforming to IS 278: 2009 with 14 SWG x 14 SWG (main wire & barb wire) with spacing of barb at max. 5 inch c/c at required line & level including man, material & transportation	15	M		0
151	P/stretch concertina coil 610mm dia	Providing & stretching concertina coil PVC coated / GI concertina coil 610 mm having medium barbs of 20 mm width, max 8 circle of coil per meter, guided by 16 SWG guide wire on both sides, including transportation, manpower, cutting - lifting & placing	5	M		0
152	P/F galvalume sheet 0.5 mm thick	Providing, placing & fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coat thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, zinc aluminum alloy coated (zinc aluminum coating not less than 150g/sqm), MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting & SMP coating of DFT 5 microns over 5 micron primer	7.5	M2		0
153	P/F Galvalume sheet 0.65 mm thick	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.65 mm total coated thickness to match existing shade (bare galvalume thickness 0.6mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	7.5	M2		0
154	P/F Precoated Galvanized Iron sheet	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coated thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	7.5	M2		0
155	P/F Al patti 50 mm	Providing & fixing aluminum flat of 50 x 6 mm on roof sheet, rate shall be inclusive of man, material, GI threaded screw with rubber washer, drilling hole @ 2m c/c	2.5	M		0
156	P/F GI corrugate sheet , 16 gauge	Gi sheet providing & fixing 16 gauge corrugated GI sheet on roof & cladding with GI bolts, nuts, washers, sealant on bolt etc. complete as directed.	1.5	M2		0
157	P/F 3 mm thick FRP sheet, plain	Providing & fixing 3 mm thick plain FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	1.5	M2		0
158	P/F 3mm thick FRP sheet, corrugated	Providing & fixing 3 mm thick corrugate FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	1.5	M2		0
159	Fixing of GI / Galvalume/FRP sheet	Providing all necessary tools tackles & services for fixing GI / galvalume/FRP sheets, rates shall be inclusive of manpower, tools, tackles, scaffolding (up to 4 meter) self tapping polymer coated screw with rubber washer / j bolt with washer & nut, shifting lead	2.5	M2		0
160	Supply of tarpaulin sheet	Supplying only of tarpauline sheet of 200 GSM of any size and shade as directed by engineer in charge. Rate shall include the cost of transportation, loading, shifting and unloading of material at site and handing over the material to person designated by respective division in charge with documentation. this item is exclusive of spreading of tarpaulin sheet.	2.5	M2		0
161	Spreading of tarpaulin sheet	Providing services for spreading of tarpaulin sheet of 200gsm at any height/sheet/terrace inclusive of making tying arrangement using 12mm polypropylene/nylon rope, rate shall be inclusive of man, material, transportation, ladder, scaffold to complete the job, payment will be made against area covered by tarpaulin, not the area of tarpaulin sheet used. Tarpaulin sheet supplied by tata power.	2.5	M2		0

162	P/F monsoon shed of tarpaulin sheet	Providing all tools, tackles and material for erecting monsoon shed for a period of 05(five) months and maintaining the same for the period. Bamboo frame work shall be made for laying 200 GSM tarpaulin sheet shed with vertical supports max. 1.00 m c/c & lateral support at max. 1.00 m c/c. All vertical supports should be of approx. 60 mm to 80 mm dia. The rate shall also include dismantling of the monsoon shed. The rate also includes obtaining necessary	7.5	M2		0
163	P/F PVC gutter 7 inch	Providing and fixing half round 180 mm uPVC gutter with rubber seal SWR grade-prince or equivalent make inclusive of joint brackets/running outlet/elbows/short stop end/stop end outlet/support bracket/pipe clamp or clamp/side or top bracket rate shall be quoted for man, material, transportation, scaffolding (up to 4 m), machine,	1.5	M		0
164	P/F Wall Mounted EWC - Office WR(1)	Providing & fixing wall mounted EWC Hindware make studio series windsor (cat no. 20061) or Parryware make indus walvit series (C0255)	0.5	EA		0
165	P/F Wall Mounted EWC- Office WR(2)	Providing & fixing wall mounted EWC of Jaquar make DRS - WHT - 37591 or ARS - WHT - 39951UFSM along with slim seat cover with soft closer, bracket, finishing the side with near white cement	0.5	EA		0
166	P/F Floor Mounted EWC	Providing & fixing floor mounted EWC Hindware make universal series (20012) or Parryware make c0271 /	0.5	EA		0
167	P/F IWC	Providing & fixing Indian WC Orrisa pan popular (Hindware make -- 20043) or orrisa pan c0117 (Parryware make)	0.5	EA		0
168	P/F Urinal (Opt 1)	Providing & fixing urinal Hindware make cat no. 60011 or Parryware make new magnum c0575	0.4	EA		0
169	P/F Urinal - (Opt 2)	Providing & fixing Urinal Hindware make Corto standard (Cat no. 60022), rate shall be inclusive of man, material, tools, bracket, connection with plumbing & drainage line so as to complete the job	0.4	EA		0
170	P/F Wall Mounted Wash Basin	Providing & fixing wall mounted washbasin Hindware make studio series (Cat no. 10096) along with bracket, connections with plumbing & drainage line using applicable flexible hose & pipe	0.5	EA		0
171	P/F Under Counter Rim Wash Basin	Providing & fixing Hindware make under counter washbasin (cat no. 10065) or Parryware make c0419, along with CP coupling	0.5	EA		0
172	P/F Counter Top Wash Basin (Jaquar)	Providing & fixing Counter top wash basin Jaquar make - JDS - WHT - 25935, rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	0.5	EA		0
173	P/F Counter Top Washbasin(Hindware)	Providing & fixing Counter top wash basin Hindware make monalisa over counter basin (cat no. 10069), rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	0.5	EA		0
174	P/F Flush Tank	Providing & fixing Hindware make sleek elegance dual flush tank	0.5	EA		0
175	P/F Concealed Flush Tank	Providing & fixing concealed flush tank Hindware make concealo 80 mm (508179) or Parryware Linea 80 mm C8114	0.5	EA		0
176	P/F Health Faucet	Providing & fixing health facuet of Hindware make flora series cat no. F160023 or Jaquar make allied series ALD 573	1	EA		0
177	P/F Jet Spray	Providing & fixing JET SPRAY of 12 mm dia and fixing it on WC seat	1	EA		0
178	P/F EWC Seat Cover	Providing & fixing Hindware make white color EWC seat cover as per required size	0.5	EA		0
179	P/F S.S. Sink	Providing & fixing Nirali make SS sink elegance popular series	0.5	EA		0
180	Prov. & Fix CP Floor Trap - 100 mm	Providing & fixing CP floor trap 100 mm dia with interlocking plate mounted on floor	1	EA		0
181	Prov & Fix PVC Nahani Trap - 100 mm	Providing & fixing PVC nahani trap 4 inch,	1	EA		0
182	P/F Nahani Trap 3	Providing & fixing 100 mm dia 3 way PVC nahani trap	1	EA		0
183	P/F Nahani Trap 4	Providing & fixing 100 mm dia 4 way PVC nahani trap	1	EA		0
184	P/F Bib Cock	Providing & fixing CP concealed bib cock Hindware made F 280002 or Jaquar make FLR 5041 along with its flange cap	1	EA		0

185	P/F Stop Cock	Providing & fixing CP concealed stop cock Hindware made F 280004	1	EA		0
186	P/F Angle Cock	Providing & fixing Angle cock Jaquar make FLR CHR 5053N	1	EA		0
187	P/F 2 Way Bib Cock	Providing & fixing 2 way bib cock Jaquar make FLR 5041 n or Hindware make F280003	1	EA		0
188	P/F Pillar Cock	Providing & fixing Hindware make pillar cock f280001 or Jaquar make FLR 5015	1	EA		0
189	P/F Pillar Cock Tall	Providing & fixing tall pillar cock Jaquar / Hindware make as per approved AOC palette (Jaquar make F460002CP / Hindware make F400005CP)	1	EA		0
190	P/F Sink Cock	Providing & fixing CP sink cock Jaquar make FLR 5009b or Hindware make f280026	1	EA		0
191	P/F Flush Valve 32mm	Providing & fixing flush valve 32 mm flow size Jaquar make FLV 1085 sq with concealed body & cover plate	1	EA		0
192	P/F Flush Valve 40mm	Providing & fixing flush valve 40 mm flow size Jaquar make FLV 1089 sq with concealed body & cover plate	1	EA		0
193	P/F Urinal Flush Valve	Providing & fixing Urinal flush valve PRS - CHR - 073 including cover plate	1	EA		0
194	P/F CP Bottle Trap,31mm	Providing & fixing 31 mm bottle trap of Jaquar make allied series ALD 769 or Hindware make flora series f850015	1	EA		0
195	P/F Overhead Shower With Mixer	Providing fixing overhead shower, code: cat. No. Ohs 1709 round shape single flow with air effect abs body & face plate chrome plated rubit cleaning system, single lever shower mixer code: FLR CHR 5123, shower arm: code: sha 479l300 round shape with 90º bend for wall mounted showers with flange	0.5	EA		0
196	P/F Bath Tub Spout	Providing & fixing Jaquar make bath tub spout SPJ 15429, rate shall be inclusive of concealed body, man, material tools, transportation required to carry out the job so as to fir for use"	0.5	EA		0
197	P/F Diverter in Washroom	Providing & fixing single liver concealed diverter body Jaquar make ALD - 055, with exposed part kit FON - 40055K	0.5	EA		0
198	P/F ovrhead Shower	PROVIDING AND FIXING OF CHROME PLATED SHOWER, DIAMETER: 100 MM of Jaquar- Code-OHS 1709 WITH LONG ARM code SHA-479 L450	1	EA		0
199	P/F Waste Coupling	Providing & fixing waste coupling Jaquar make 32 mm dia ALD - CHR - 705L130	1.5	EA		0
200	P/F Flexible Pipe	Providing & fixing flexible pipe 32 mm dia	1.5	EA		0
201	P/F Hose Pipe	Providing & fixing PVC hose pipe of 12 mm dia including connecting with plumbing fixtures	1.5	EA		0
202	P/F Foot Operated Tap	Providing & fixing Jaquar exposed foot operated valve PRS-STL-033EF	1	EA		0
203	P/F Double Coat Hook	Providing & fixing Double coat hook Jaquar make AKP-CHR-35761P	1	EA		0
204	P/F Grab Bar - 600 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1507 (600 mm long)	1	EA		0
205	P/F Grab Bar 450 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1503 (450 mm long)	1	EA		0
206	P/F Grab Bar 300 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1501 or AKP-CHR- 35701 (300 mm long)	1	EA		0
207	P/F Toilet Roll Holder	Providing & fixing toilet paper roll holder Jaquar make Kubix prime series (AKP 35753PS) or Continental series (ACN - 1153N)	1	EA		0
208	P/F Soap Dispenser	Providing & fixing Soap dispenser Shresmo make SHD - 12618	1	EA		0
209	P/F Tissue Paper Dispenser	Providing & fixing Tissue paper dispenser Euronics make EP23 or Opera make	1	EA		0

210	P/F Eye Washer System	SAFETY Eye Washer SHOWER - 6250 GI Udyogi Safety Shower & eyewash operates independently by pull rod, H& push lever & foot lever Shower: Extra-large drench shower head made of highly visible yellow ABS plastics Pipe: ISI marked GI pipe with powder coating for anti-corrosion Valve: SS stay open ball valve with yellow ABS push plate Bowl: Receptor bowl made of ABS & highly resistant to acid, Alkali & oil among others. Atomiser heads: Twin soft flow atomiser head which has aerators to control	0.5	EA		0
211	Prov., Laying & Fix, UPVC 12mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 12 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
212	Prov.,Laying&Fix,UPVC 19mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme dia 19mm	1	M		0
213	Prov.,Laying&Fix, UPVC 25mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 25 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
214	Prov.,Laying&Fix, UPVC 32mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 32 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
215	Prov.,Laying&Fix, UPVC 38mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 40 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
216	Prov.,Laying&Fix, UPVC 50mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends - 50 mm	1	M		0
217	Prov.& Replcng CPVC 12mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:12 mm	1	M		0
218	Prov.& Replcng CPVC 19mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:19 mm	1	M		0
219	Prov.& Replcng CPVC 25mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:25 mm	1	M		0
220	P/F Pipe, C Class, GI 12mm	Providing & fixing RST / Hindustan make c class GI pipe of 12 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
221	P/F Pipe, C Class, GI 19mm	Providing & fixing RST / Hindustan make c class GI pipe of 19 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
222	P/F Pipe, C Class, GI 25mm	Providing & fixing RST / Hindustan make c class GI pipe of 25 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
223	P/F Pipe, C Class, GI 32mm	Providing & fixing RST / Hindustan make c class GI pipe of 32 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
224	P/F Pipe, C Class, GI 38mm	Providing & fixing RST / Hindustan make c class GI pipe of 38 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
225	P/F Pipe, C Class, GI 50mm	Providing & fixing RST / Hindustan make c class GI pipe of 50 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
226	P/F Pipe, C Class, GI 65mm	Providing & fixing RST / Hindustan make c class GI pipe of 65 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0

227	P/F SWR 75mm PVC Pipe Type A	Providing & fixing SWR 75 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
228	P/F SWR 90mm PVC Pipe Type A	Providing & fixing SWR 90 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
229	P/F SWR 110mm PVC Pipe Type A	Providing & fixing SWR 110 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
230	P/F SWR 160mm PVC Pipe Type A	Providing & fixing SWR 160 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
231	P/F SWR 75mm PVC Pipe Type B	Providing & fixing SWR 75 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
232	P/F SWR 90mm PVC Pipe Type B	Providing & fixing SWR 90 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
233	P/F SWR 110mm PVC Pipe Type B	Providing & fixing SWR 110 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
234	P/F SWR 160mm PVC Pipe Type B	Providing & fixing SWR 160 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
235	Prov./Laying Salt Glazed Pipe 100mm	Providing & laying salt glazed pipe of 100 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	1	M		0
236	Prov./Laying Salt Glazed Pipe 150mm	Providing & laying salt glazed pipe of 150 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	1	M		0
237	Prov./Laying Salt Glazed Pipe 200mm	Providing & laying salt glazed pipe of 200 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	1	M		0
238	Prov.&Laying Hume Pipe,150mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 150 mm dia.	1	M		0
239	Prov.&Laying Hume Pipe,200mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 200 mm dia.	1	M		0

240	Prov.&Laying Hume Pipe,300mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 300 mm dia.	1	M		0
241	Prov.&Laying Hume Pipe,450mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 450 mm dia.	1	M		0
242	Laying of HDPE Pipe Of Any Dia	Providing Services for laying of HDPE pipe of any dia, rate shall be inclusive of man, shifting of material from local Tata Power stores to the site, cutting, laying and disposing wastage at Tata Power scrap yard, rate will be exclusive of necessary excavation or allied work	1	M		0
243	Prov.,Cutting&Fix,Pipe ,HDPE,140mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 140 mm	1	M		0
244	Prov.,Cutting&Fix,Pipe ,HDPE,200mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 200 mm	1	M		0
245	P/F,Gate valve,12mm ISI Marked	Providing and fixing of gate valve, diameter: 12 mm, ISI make or make: ganga	1	EA		0
246	P/F,Gate valve,19mm ISI Marked	Providing and fixing of gate valve, diameter: 19 mm, ISI make or make: ganga	1	EA		0
247	P/F,Gate valve,25mm ISI Marked	Providing and fixing of gate valve, diameter: 25 mm, ISI make or make: ganga	1	EA		0
248	P/F,Gate valve,39mm ISI Marked	Providing and fixing of gate valve, diameter: 39 mm, ISI make or make: ganga	1	EA		0
249	P/F,Gate valve,50mm ISI Marked	Providing and fixing of gate valve, diameter: 50 mm, ISI make or make: ganga	1	EA		0
250	P/F Water meter 3 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 3 inch dia pipe	0.3	EA		0
251	P/F Water meter 4 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 4 inch dia pipe	0.1	EA		0
252	P/F Foot Valve - 1 Inch	Providing & fixing Fixing brass foot valve of 1 inch foot valve along with necessary accessories	1.5	EA		0
253	P/F Foot Valve -1.5 Inch	Providing & fixing Fixing brass foot valve of 1.5 inch foot valve along with necessary accessories	1.5	EA		0
254	P/F Foot Valve - 2 Inch	Providing & fixing Fixing brass foot valve of 2 inch foot valve along with necessary accessories	1.5	EA		0
255	P/F Foot Valve - 2.5 Inch	Providing & fixing Fixing brass foot valve of 2.5 inch foot valve along with necessary accessories	1.5	EA		0
256	P/F Foot Valve - 3 Inch	Providing & fixing Fixing brass foot valve of 3 inch foot valve along with necessary accessories	1.5	EA		0
257	P/F Pressmatic Tap	Providing & fixing Jaquar make PRS - CHR - 031 pressmatic tap	1.5	EA		0
258	P/F brass Rod Ball Cock,12mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 12 mm, first quality and of ISI approved make	1	EA		0
259	P/F brass Rod Ball Cock,19mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 19 mm, first quality and of ISI approved make	1	EA		0
260	P/F brass Rod Ball Cock,25mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 25 mm, first quality and of ISI approved make	1	EA		0
261	P/F brass Rod Ball Cock,50mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 50 mm, first quality and of ISI approved make	1	EA		0
262	P/F 500 Ltr PVC Tank	Providing & connecting 500 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	0.4	EA		0
263	P/F 1000 L PVC Tank	Providing & connecting 1000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by	0.4	EA		0
264	P/F 2000 L PVC Tank	Providing & connecting 2000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by	0.4	EA		0
265	P/F 5000 L PVC Tank	Providing & connecting 5000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by	0.8	EA		0
266	Providing Plumbing Services	Providing Services for misc plumbing works, rate shall be inclusive of manpower of 1 plumber & helper	1.5	EA		0

267	Prov. Plumbing Material for repairs	Providing Necessary material for plumbing work as approved by EIC, Payment will be made against submitted original invoice / challan of material, including 15% vendor's profit	1.5	EA		0
268	Replacement of Sensor Tap-Washbasin	Providing & fixing sensor tap Hindware make F240001CP or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, removal of existing tap and installation of new tap	1.5	EA		0
269	Replacement of Sensor Batteries	Removing and replacing of sensor batteries, plumbing services including all required tools, tackles, materials, and fixtures, including loading, unloading and transportation up to site for laying etc. complete as directed for following items	1.5	EA		0
270	P/F FRP Grating - 38 X 38 X 38	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (7 - 5 mm), height 38 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	1	M2		0
271	P/F FRP Grating - 38 X 38 X 25	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (6 - 5 mm), height 25 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	1	M2		0
272	P/F FRP Grating - 50 X 50 X 12	P/F FRP molded grating of mesh size 50 X 50 mm with rib thickness (8 - 5 mm), height 12 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	1	M2		0
273	P/F FRP pultruded grating 50 mm thk	Supplying and installation of FRP cover grating code CT40-200 with frame of 50x50x5mm angle and 3mm top chequered plate load bearing capacity of 2200kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin.	1	M2		0
274	P/F FRP pultruded grating 75 mm thk	Supplying and installation of FRP cover grating 75 mm thick light weight code ct25-200 (25 mm thick grating) plus frame of 50x50x5mm box pipe, and 3mm top chequered plate load bearing capacity of 400kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin. Colour # yellow.	1	M2		0
275	P/F FRP manhole cover (900 mm dia)	Prov. & fixing 900 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	0.5	EA		0
276	P/F FRP manhole cover (750 mm dia)	Prov. & fixing 750 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	0.5	EA		0
277	P/F FRP manhole cover (600 mm dia)	Prov. & fixing 600 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	0.5	EA		0
278	P/F FRP manhole cover (300 X 300)	Prov. & fixing 300 X 300 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
279	P/F FRP manhole cover (450 X 450)	Prov. & fixing 450 X 450 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
280	P/F FRP manhole cover (450 X 600)	Prov. & fixing 450 X 600 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
281	P/F FRP manhole cover (450 X 900)	Prov. & fixing 450 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
282	P/F FRP manhole cover (600 X 900)	Prov. & fixing 600 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
283	FRP storm water drain cover 300X300	Prov. & fixing 300 X 300 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
284	FRP storm water drain cover 450X450	Prov. & fixing 450 X 450 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
285	FRP storm water drain cover 450X600	Prov. & fixing 450 X 600 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
286	FRP storm water drain cover 450X900	Prov. & fixing 450 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
287	FRP storm water drain cover 600X900	Prov. & fixing 600 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0

288	P/F FRP fencing	Supplying & Installation of FRP Fencing to sub station of height 2.4 M, with FRP Vertical pipe 50x50x5mm, & FRP Angle of 50x50x5mm, & FRP Grill of square 38mmx38x10mm, thickness 6 mm. The grill are fitted in the Angle frame, which will be fixed on Vertical pole with Foot pad 150x150x130mm, using Anchor Fastener of 16 mm HILTI Made as per given dawing. incl. gate made with same framing, SS Hinge & aldrop. Material to be used will be as per IS 6746 ISOPTHALIC	0.5	M		0
289	P/L FRP septic tank	P/I FRP septic tank, rate shall be inclusive of man, material, tools, transport, installation to the line & level and connecting it with sewage system	0.5	L		0
290	P/F FRP railing	Supplying, fabricating and erecting of approved shade FRP Pultruded handrail square pipe having size 50X50X6.35 mm thick consisting of double FRP rail with top rail & mid rail at 1000 mm & 500 mm respectively & Vertical pipe post of square pipe having size 50X50X6.35 mm thick erected at not more than 1500 mm c/c distance including its own connecting foot pad of size 150 x150 x130 mm fitted with SS 304 M12 -100 LG anchor bolt at bottom with all neceessary accessories and 100 X3 mm toe guard	1	M		0
291	P/F FRP perforated cable trays	Prov. FRP make perforated cable trays of size 450 mm including support	1	M		0
292	P/F FRP chajja	Prov. & fixing 3 mm thick FRP Chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site including scaffolding (up to 12 meter)	0.5	M2		0
293	P/F FRP chajja - excl. scaffolding	Prov. & fixing 3 mm thick FRP chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site, excluding scaffolding and manlifter	1.5	M2		0
294	P/F CMRCL flush door shtr,38mm	Providing Services & material for 38 mm thick commercial flush board shutter with 1 mm thick laminate of Century / Greenlam / Kitply of required shade, 6 mm thick 2 year seasoned teakwood lipping, making any cutout for glass including fixing of glass with beading, 3 nos. 4 inches railway type hinges, 110 mm CP handle, CP aldrop, door stopper on each shutter, sneak hole with glass, painting of lipping by 2 coats of approved enamel paint.	1	M2		0
295	P/F kitchen under counter shutter	Providing Material & fixing under counter kitchen cabinet with frame & shutter, rate shall be inclusive of 1 inch thick frame, 18 mm Greenply made plywood shutter with 1 mm century laminate Natural Oak 3397 & white sun mica internal side, 6 mm lipping of all four side, chrome plated handle, magnet lock, SS hinges, two coat paint of synthetic enamel paint of approved shade on frame	1	M2		0
296	P/F fire rated door with panic bar	Providing , fixing, loading unloading , single Leaf 2 hrs fire resistant door with 44 mm shutter thickness, in fill honey comb core, doors shutter made of GI sheet of 0.9 mm thick and frame made of GI sheet of 1.3 mm thick with single rebate frame of 100 * 75 mm . Powder coated frame & shuter with 50-60 micron, including 6 mm thick fore rated galss panel for clear vision 200 * 300 mm, SS 304 fire rated ball bearing hinges , with panic bar single point, external trim,	0.5	M2		0
297	P/F Al anodised,window,2 track	Providing, erecting and fixing of aluminum anodized sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class B section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per IS code or as directed	1.5	M2		0

298	P/F Al anodised,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as	1.5	M2		0
299	P/F Al anodised,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	1.5	M2		0
300	P/F Al powder coated,window,2 track	Providing, erecting and fixing of aluminum powder coated sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class b section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	1.5	M2		0
301	P/F Al powder coated,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal make class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is	1.5	M2		0
302	P/F Al powder coated,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal make b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	1.5	M2		0
303	P/F domal section windows (2 track)	Providing & fixing 2 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or equivalent	1.5	M2		0
304	P/F domal section windows (3 track)	Providing & fixing 3 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or equivalent	1.5	M2		0
305	P/F UPVC windows	Providing & fixing factory made white UN-Plasticized poly Vinyl chloride (UPVC) windows(FENESTA or Equivalent as approved by site in charge) at all levels made out ofextruded three chambered profile frame with hermetically sealed double glazed glass customized in 56mm wide system ,all fittings and fixing at site andsealing the gaps etc. as per the designed and as directed by site in charge.	1.5	M2		0
306	P/F Al powder coated fixed windows	Providing & fixing Al powder coated fixed window using 63 X 38 X 14 gauge powder coated Al section with powder coating min. 50 micron on exposed surface, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	1	M2		0
307	P/F Al anodized fixed windows	Providing & fixing Al anodized window using 63 X 38 X 14 gauge powder coated Al section with buffing of all sections, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	1	M2		0
308	P/F Anodized Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal make anodized and buffed as per required shade, with Z section for installation of 100 mm wide blur / frosted annealed glass	1	M2		0

309	P/F powder coated Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal , with Z section for installation of 100 mm wide blur / frosted annealed	1	M2		0
310	P/F Anodized Al partition	Providing & fixing Al anodized partition made of 63 X 38 mm 14 gauge Jindal make sections, with buffing of all surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	1	M2		0
311	P/F Al powder coated partition	Providing & fixing Al powder coated partition made of 63 X 38 mm 14 gauge Jindal make sections, with min 50 micron powder coating at exposed surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	1	M2		0
312	P/F Aluminum anodized door	Providing & fixing partly glazed partly panelled Al anodizing door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top	1	M2		0
313	P/F Aluminum powder coated door	Providing & fixing partly glazed partly panelled Al powder coated door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top, minimum 50 micron powder coating	1	M2		0
314	P/F Aluminum framed backelite door	Providing & fixing backelite door made of 16 gauge X 25 X 65 mm Al powder coated frame with 3 mm thick backelite sheet along with 4 inch tower bolt, 3 nos. hinges, installation	1	M2		0
315	P/F Al grill (2 x 2 inch)	Providing & fixing Al Grill - mesh opening 50 mm X 50 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	1	M2		0
316	P/F AL grill (3 x 3 inch)	Providing & fixing Al Grill - mesh opening 75 mm X 75 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	1	M2		0
317	P/F Door closer	Providing & fixing HYPER / GODREJ (9420) / ENOX / DORMA (TS 71) MAKE DOOR CLOSER	1	EA		0
318	P/F concealed door closer	Providing & fixing concealed door closer Godrej / Dorma / Enox make as per approved AOC palatte	1	EA		0
319	P/F door floor spring	Providing & fixing Floor spring including making cut out in floor and fixing of spring, rate shall be inclusive of man, material, installation so as to complete the job. (Product - Dorma make BTS 75V / Godrej make	1	EA		0
320	P/F PVC beading of windows	Providing & replacing beading of sliding windows with PVC beading, rate shall be inclusive of man, material, opening of window shutter and replacing beading, refixing	1	M		0
321	P/replacing friction stay hinges	Providing & replacing SS 430 / SS 201 friction stay hinge of openable window of 10 inch for max width 1200 mm, , rate shall be inclusive of manpower, material, removal of window, replacement of hinge and reinstallation of window	1	EA		0
322	P/F cp tower bolt 6	Providing & fixing 6 inch CP tower bolt	1	EA		0
323	P/F CP tower bolt 8	Providing & fixing 8 inch CP tower bolt	1	EA		0
324	P/F aldrop	Providing & fixing 12 inch CP aldrop	1	EA		0
325	Prov. & replacing SS wire mesh 24G	Providing & replacing ss mosquito mesh of existing sliding windows shutters at all heights including removing damaged mesh, providing new ss mosquito mesh 24 gauge 16 mesh and fixing it in window as earlier of matching shape and design with nails / screw complete with finishing as directed by TPC	1	M2		0
326	P/F cylindrical lock	Providing & fixing cylindrical lock Godrej / Enox / Hafele / equivalent make as per AOC palette	1	EA		0
327	P/F mortise lock (office door)	Providing and fixing brass mortise latch & lock 100mm X 65mm with 6 levers & a pair of brass lever handle(for main door).	1	EA		0

328	P/F 12 mm thk toughened glass door	Providing & fixing 12 mm thick toughened glass door cut to the required size with Godrej make Patch fittings for top, bottom pivot and side patches, rate shall be inclusive of man, material, transportation and installation at site	0.5	M2		0
329	P/F toughen glass door lock - door	Providing & fixing toughen glass door lock (Godrej make - prod code 7780)	0.5	EA		0
330	P/F toughen glass door lock - floor	Providing & fixing Bottom lock in glass door Godrej make Bottom lock patch 7759 or Godrej make Side lock patch 7764.	0.5	EA		0
331	P/F door stopper	Providing & fixing chrome plated door stopper	1	EA		0
332	P/F door buffer	Providing & fixing 100 mm long door buffer made of	1	EA		0
333	P/A of sun film	Providing & applying Garvare make sun control film of required shade, Garware make high heat rejection film HHR 25	2.5	M2		0
334	P/F white board film	Providing & fixing Garware make White Board film of PTE film thickness 150 micron	1	M2		0
335	P/F partition cubicle for washroom	Providing & fixing Modular cubical in 12mm compact laminate of approved color and texture with ss hardware comprising of door shutter, wall fixing rose, head, rail, wall bracket, tubular holder, corner connector, coat hook cum door stopper, lock cum occupancy indicator, hinge, door knob, adjustable foot and all other necessary accessories required to complete the job in all respect. Make - matrix,	1	EA		0
336	P/F urinal partition	Providing & fixing urinal partition: providing and fixing of urinal composite partition of approved colour and make including all tools and tackles fixing at site in line and level etc complete as directed.	1.5	EA		0
337	P/F mirror - 600 x 450	Providing & fixing mirror of size 600 X 450 along with bracket / studs	0.5	EA		0
338	P/F mirror - circular	Providing & fixing Mirror of 550 mm dia along with brakcet / studs	0.5	EA		0
339	P/F toughen glass 12 mm	Providing & fixing 12 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gauge Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	1	M2		0
340	P/F toughen glass 8 mm	Providing & fixing 8 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gague Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	1	M2		0
341	P/F H handle for glass door(450 mm)	Providing & fixing of Godrej make H tyep HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (length -	1	EA		0
342	P/F H handle for glass door(600 mm)	Providing & fixing of Godrej make H type HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (lentgh	1	EA		0
343	P/F cabin door handle	Providing & fixing of Godrej make NEH 03 handles	1	EA		0
344	Silicon sealant - stone to al	Providing & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to granite / marble stone	1	M		0
345	Silicon sealant - masonry to al	Poviding & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to cement plaster surface	1	M		0
346	Silicon sealant - glass to glass	Providing & applying clear silicone sealant of Dow / Dr. Fixit silicon sealant suitable for glass	1	M		0
347	P/F gypsum board false ceiling	Providing & fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing and fixing of framework as spelled out in approved manufacturer catalogue. Bidder to provide adequate steel sections & hanger supports, including making openings for ac grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick.Vertical / inclined face shall be measured above 200 mm high only.	5	M2		0

348	P/F tegular grid ceiling	providing & fixing tegular grid ceiling system, at all heights including providing and fixing of framework in silhouette system sections as spelled out in Armstrong or equivalent manufacturer catalogue. Ceiling tiles shall be of size 600 mm x 600 mm of approved color. Incl. adequate steel sections (channel, main runner, cross runner in silhouette section) and hanger / GI wire supports to cater to the false ceiling loads. Approved make: Armstrong or equivalent	5	M2		0
349	P/F gypsum board false ceiling-Band	Providing all materials and fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing & fixing of framework as spelled out in Saint Gobain or equivalent. Incl. adequate steel sections (channels, L or T sections) and hanger supports to cater to the ceiling loads. Incl. making openings for AC grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick. (For width below 200 mm)	10	M		0
350	P/F gypsum board	Providing all materials and fixing monolithic gypsum board conforming to IS 2095, at all heights on existing supports. Vertical / inclined face shall be measured above 200 mm high only. For payment purpose false ceiling shall be measured in plan only.	4.5	M2		0
351	P/F 3 mm thick backelite sheet	Providing all materials and fixing 3 mm thick backelite sheet, at all heights on existing supports. For payment purpose false ceiling shall be measured in plan only.	4.5	M2		0
352	P/F PVC false ceiling	Providing & fixing PVC ceiling planks 7 to 10 mm thick, including providing and fixing of framework as spelled out in manufacturer catalogue. Quote shall include sealing off the ends, capping, all support systems, edges framing etc.	4.5	M2		0
353	P/F false ceiling - open cell # WR	Providing & fixing of open cell cellio metal false ceiling system at all heights including providing and fixing of framework as spelled out in Armstrong or equivalent, size 600 mm x 600 mm. including providing adequate steel sections (channels, i or t sections) and hanger supports to cater to the false ceiling loads. Owner would check the design and adequacy and has the right to reject if found inadequate. Job to be complete in all respect.	1.5	M2		0
354	P/F perforated false ceiling	Prov & fixing of Infratop false ceiling with hidden/visible perforations, of panel sizes of 340mmx 2700mm, resistant to moisture, borer-fungus-termite attack. Panels to be installed with GI / Aluminum sections of suitable gauge & size according to site conditions. Panels SV 08/07 &09 with suitable trims SV 15 with dimensions 40x19x22x12x3050 mm for edge profiles & SV 18 with dimensions 67x3050 mm with T head of 42mm for connecting profiles. 10 years warranty for colour & finish of the panels	2.5	M2		0
355	Fixing existing false ceiling	Providing Services for fixing of available false ceiling panel by laying new mesh of silhouette section supports, rate shall be inclusive of man, material, tools & tackles, transportation	2.5	M2		0
356	P/F Antistatic false flooring-300mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-	2.5	M2		0
357	P/F Antistatic false flooring-450mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-	2.5	M2		0
358	P/F Antistatic false flooring-600mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-	2.5	M2		0

359	Installing existing false flooring	Providing Services for installation of existing false flooring panels, rate shall be inclusive of manpower, flooring support of 450 mm, laying & fixing supports to the line and level, cutting of flooring panels as per site requirement and installation	2.5	M2		0
360	P/F ACP cladding	Supplying and fixing aluminum composite panel of approved make and colour for exterior application. The 4 mm thick panels of 3mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with self-adhesive peel off masking foil with PVDF base coating on top side and rear side would be in mill finish. As per the specification duly fabricated on imported holzer machines and fixed to extruded aluminum sections	2.5	M2		0
361	P/ F ACP cladding (firewall a2)	Providing & fixing Aludecor make firewall a2 ACP sheets or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, al support structure using 25 x 25 mm square pipe, cutting of sheet, wastage and disposing of debris outside tata	1.5	M2		0
362	P/F ACP cladding (excl. support)	Providing & fixing ACP sheet of approved make & colour for exterior application. The 4 mm thick panels of 3 mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with PVDF base coating on top side & rear side would be in mill finish. fixed to existing support	5	M2		0
363	Removing of blinds	Providing Services for removal of vertical / roller blinds and disposal it scrap yard or designated place as instructed by EIC	5	M2		0
364	Fixing of available blinds	Providing Services for fixing of existing available roller blind / vertical blinds, rate shall be inclusive of manpower, necessary screws or minor fixtures to complete the job	1.5	M2		0
365	P/F vertical blinds	Providing and fixing of vertical blind for window. Providing Aluminum channel with 100mm fabric size with operating unit .etc providing all equipment, material, tools, tackles etc for fixing blinds of approved make and shade etc complete as directed by site in charge	1.5	M2		0
366	Serv. for repair of vertical blinds	Providing services for repairing chain / holder etc for vertical blind.	1.5	M2		0
367	P/F roller blind	Providing and fixing of roller blind for window, providing, translucent fabric, with Aluminum frame and control unit along with the material, tools, tackles etc for fixing blinds for windows of approved make and shade by tata power etc complete as directed (product - platina make 01a bamboo or 01a alfa)	1.5	M2		0
368	Prov services of carpenter (1+1)	Providing carpentry services for one shift, rate shall be inclusive of one carpenter & one helper	1.5	EA		0
369	Prov Material for carpentry repairs	Providing Material for minor carpentry works, payment will be made against submitted bills and challans of material, incl. 15% profit for vendor	1.5	EA		0
370	Chair repair - handle (godrej)	Providing & replacing handle of chair for Godrej make leoma	0.5	EA		0
371	Chair repair - handle (stellar)	Providing & replacing handle of chair for stellar make Rev CH 16	0.5	EA		0
372	Chair repairs - wheel	Providing & replacing wheel of chair of Godrej / stellar make chairs	0.5	EA		0
373	Repl. Hyd. Cylinder chair (godrej)	Providing & replacing hydraulic cylinder of chair (for Godrej make leoma) along with handle	0.5	EA		0
374	Repl. Hyd. Cylinder chair (stellar)	Providing & replacing hydraulic cylinder of chair (for stellar make Rev CH 16) along with handle	0.5	EA		0
375	Prov. & replacing laminate 1 mm	Providing & replacing laminate of wooden door or shelf, rate shall be inclusive of removal of existing laminate by heating, grinding the surface to the smoothest possible, applying adhesive and pressing 1 mm thick laminate of approved shade and make over cleaned surface, rate shall be inclusive of man, material, transportation, wastage and disposal of debris, removing & refixing of door	0.5	M2		0

376	Removal and refixing of door	Removing and refixing of wooden door (size height: 80-inches (6-feet, 8-inches) thickness: 1 ¾-inches. Width: 36-inches, providing all tools tackles material for removing and refixing the wooden door completed as	0.5	M2		0
377	Marking & Painting of Strips 100mm	Marking and painting of strip, width: 100 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two	2.5	M		0
378	Marking & Painting of Strips 75 Mm	Marking and painting of strip, width: 75 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect	2.5	M		0
379	Marking & Painting of Strips 50 Mm	Marking and painting of strip, width: 50 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect	2.5	M		0
380	Providing & Carrying Out White Wash	Providing & carrying out Whitewash by cleaning the surface by using brush, making it free from any loose or foreign material, dirt, oil, grease etc., preparing white wash water with mixing 1kg class D lime with 6 litres of water, leaving it for 2 days for uniform thin cream, mixing glue 100 gm per 6l of whitewash water, then applying it in two coats to achieve uniformity in white wash.	2.5	M2		0
381	P/A 2 Coats of Lime Geeru Upto 3 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and	1.5	EA		0
382	P/A 2 Coats of Lime Geeru 3 to 6 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth 3 feet to 6 feet.	1.5	EA		0
383	P/A 2 Coats of Lime Geeru above 6Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth above 6 feet.	1.5	EA		0
384	P/A Synthetic Enamel Paint	Providing and applying two coats of synthetic enamel paint of approved make over one coat of primer on structural steel including scaffolding at all height, providing all material for process	1.5	M2		0
385	P/A Acrylic Emulsion Interior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including filling up the crevices, cracks & holes with approved quality of painter#s putty and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (internal quality) of first quality and of approved manufacturers and approved shades.	7.5	M2		0
386	P/A Duco Paint	Prov. & applying duco paint as per following process:- 1) Filling dents and uneveness using wood filler putty and sanding it 180 no. sand paper 2) Applying 1st coat of primer with thinner (1 thinner : 1.5 primer) 3) sanding the surface again and fill the dents using wood filler putty 4) Apply one coat of primer on repaired surface and sand the surface with 220 & 320 no. sand paper 5) Apply 2 coat of duco paint (Duco NC lacquer 1 part: Duco thinner 2 part).	2.5	M2		0

387	P/A Acrylic Emulsion-1 coat interna	Supplying providing and applying to wall with water base acrylic emulsion paint of approved manufacture and of approved colour and shade including scaffolding etc complete as directed by EIC and application as per manufacturer's recommendation, including scaffolding ,cleaning surface etc. Acrylic	7.5	M2		0
388	P/A Acrylic Emulsion Exterior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including opening up of crevices, cracks & holes and making v grooves, and filling up with approved quality of crack filler and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (external quality) of first quality and of approved manufacturers and approved	5	M2		0
389	P/A Leafy Aluminum Paint	Providing all necessary tools ,tackles ,preparing the surface by scraping, chipping to remove loose rust, paint, detrimental foreign matter etc. Providing and applying one coat of high build zinc phosphate primer 35 microns DFT. Applying two finish coats of leafy aluminum paint (IS 2339) of 30 microns DFT of each coat complete as directed by EIC at all heights. total thickness of DFT shall not be less than 95 microns	2.5	M2		0
390	P/A Birla White Putty	P/A Birla white putty, Mix Birla white wall care putty with clean water slowly to make paste. Continue the mixing for 10-15 minutes till a uniform paste is formed. Apply the first coat on already moistened wall surface. After drying of first coat of putty just rub the surface gently with west sponge or rub the surface very gently with the putty blade in order to remove the loose particles. Allow the surface to dry for at least 3 hours and then apply second coat.	2.5	M2		0
391	P/A POP Punning	Providing and applying of 4 to 8 mm thick lime pop punning over all types of plastered surfaces of walls ceiling beams columns etc. To bring surface in plumb line and level, including making surface smooth, providing required grooves on top of skirting etc. The cost shall include all labour, materials, scaffolding, protecting adjoining surface, cleaning etc complete.	2.5	M2		0
392	P/A High Build Epoxy Paint	Providing and applying one coat of surface tolerant epoxy primer at 50 microns DFT followed by two finishing coats of high-build coal tar epoxy in recommended DFTs (100 microns DFT per coat) for chequered plates / gratings. Total thickness of DFT shall not be less than 250 microns. Item includes preparing the surface by scraping, sand papering, cleaning, solvent cleaning wherever required to remove oil/grease & painting with two coats of high-build coal tar epoxy in recommended DFT.	2.5	M2		0
393	P/A Varnishing	Preparing the surfaces of wood by removing the existing stains, dirt, etc. By sand papering, filling cracks, depressions etc. with approved quality of putty or wax wherever required and as recommended by TPCL engineer and applying coats of French polish.	2.5	M2		0
394	P/A Melamyne Polish	P/A melamyne Polish (Make asian paint or equivalent approved by Tata Power) on wooden surface including all tools ,tackles ,plant, equipment (i) Scrubbing with sand paper (ii) Applying lac polish/spirit and lak dana solution (iii) filling small holes/cracks/scratches making surface even with putty/whiting mix with desired raw/burnt/burnt turkey amber sienna and lac polish (iv) Apply sand paper again on applied putty/whiting for finishing surface (v) Apply 2 coats of polish with buffing	2.5	M2		0
395	P/A PU Polish	Providing all necessary tools tackles services etc. For removing & providing high quality PU polish on door as directed by site engineer. Shade and color of the polish shall be same as previous shade & color.	2.5	M2		0
396	P/A Luminous Paint	Prov. & applying luminous paint of required shade, rate shall be inclusive of scrapping of surface to make it free from dirt, oil and algae, applying one coat of water based primer and two coats of luminous paint	2.5	M2		0

397	Services for Wild Growth Cutting	Providing Services for removal of grass / shrubs (of size up to 3 feet height) by uprooting them or cutting them from base, rate shall be inclusive of man, tools, disposal of wild growth outside tata power premises	12.5	M2		0
398	Services for Weedicide Spraying	Providing & spraying weedicide at switchyards in power house, rate shall be inclusive of material, spraying tools, manpower so as to complete the job. Vendor should submit MSDS of weedicide prior to use	12.5	M2		0
399	Service for Cleaning of Moss	Providing Services for moss removal by spraying bleaching powder over the area, leaving it for 30 minutes and spray water over it	12.5	M2		0
400	Service for Housekeeping	Providing Services for material shifting & cleaning of operational areas as instructed by EIC	20	M2		0
401	Prov.& Supply Red	Supplying natural red soil at site as directed by EIC	1	M3		0
402	Prov. & supply manure	Providing & supplying good cow dung manure, loading & unloading at site etc.	1.5	M3		0
403	Serv. clearing Sewage Line Chockup	Providing Services for completing / attempting choke up clearance in any sewage line by using traditional method of using 8 mm / 10 mm reinforcement bar, pouring in water with pressure as much as possible as instructed by EIC	2.5	M		0
404	Cleaning Septic Tank by suctiontank	Providing Services of municipal corporation suction tank & ite operating team	0.6	EA		0
405	Serv for Cleaning of Sewage Chamber	Providing Services for cleaning of sewage chamber of all sizes by removing its muck and disposing it away from residential area outside tata power premises	1.5	EA		0
406	Serv for Gravel & Boulders Removal	Providing Services for removal of gravel & boulders filled in transformer foundation or in switch yard ground and shifting within 100 meter lead inside tata power premises	1.5	M3		0
407	Serv for Laying available Gravel	Providing Services & material for laying gravels (50 - 60 mm) in transformer foundation with gravels & boulders (200 - 250 mm) available at site as instructed	1.5	M3		0
408	Prov. & Laying Gravel in Switchyard	Prov services & material gravel in switch yard of size 50 - 60 mm in layer maximum upto 300 mm depth, rate shall be inclusive of shifting material within 200 meter lead, levelling of surface	1.5	M3		0
409	Prov & Laying Sand Bags	Providing & laying river / sea sand bags (min weight 20 kg per bag), shifting & laying cable trenches	1.5	EA		0
410	Prov. & filling sand in trenches	Providing Services for river / sea sand filling in trenches and levelling, rate shall be inclusive of man, material, shifting of sand upto 100 m lead.	1.5	M3		0
411	Services for removal of Sand Bags	Providing Services of removal of sand bags and shifting it to designated place as instructed by EIC	1.5	EA		0
412	Services for Laying of Sand Bags	Providing Services for laying of existing sand bags, rate shall be inclusive of shifting of sand bags upto lead of 100 m	1.5	EA		0
413	Const. of earth pit 600 x 600	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 600mm x	1.5	EA		0
414	Const of earth pit 900 x 900	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 900mm x	1.5	EA		0
415	Const of earth pit 1200 x 1200	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 1200 mm x	1.5	EA		0

416	Supplying Marconite rod 100 mm dia	Supplying 3 m long marconite rod by casting marconite compound around 20 mm dia copper rod, rate shall be inclusive of man, material, tools, transportation and installation at site, rod must be	1.5	EA		0
417	Refurbishment of earth pit 600x600	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 600 mm x 600mm	1.5	EA		0
418	Refurbishment of earthpit 900 x 900	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 900 mm x 900mm	1.5	EA		0
419	Refurbishment of earthpit 1200x1200	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 1200 mm x 1200mm	1.5	EA		0
420	Brazing of Copper Conductor 0.2 mm	Providing all material, tools and tackles, service for brazing of 0.2 copper conductor	1.5	NO		0
421	Laying Copper Conductor 0.2mm	laying copper conductor,0.2mm, providing all tools & tackles for laying conductor in line as directed by EIC	1.5	M		0
422	P/A Acrylic waterproofing	Providing & applying Acrylic waterproofing coat over RCC roof including removing of existing waterpoofing treatment, removing damaged or loose portion of roof substrate, preparing surface free of dirt, oil etc., filling unlevelled surfaces with polymer modified mortar prepared by Dr. Fixit URP & filling surface cracks with Dr.Fixit Crack X, grouting of roof with non shrinkable polymeric grout, then applying primer coat of Dr. Fixit primeseal two coats of Dr. Fixit New coat with fibreglass mat	2.5	M2		0
423	Prov Brick bat coba waterproofing	Providing and laying brickbat coba in sunken portion of WCs, bathrooms, etc., consisting of one part of cement, 2 parts of broken brickbats varying from 12 mm to 25 mm thick and one part of lime mortar to two parts of sand as specified including preparing the surface by applying and grouting a slurry coat of neat cement using 2.75 kg/m2 of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the	2.5	M2		0
424	P/A APP / STP membrane	Providing and applying of Shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application followed by providing and applying of shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application. Top surface : providing and applying silver shield (bituminous aluminum coating) (With 5 year guarantee).	2.5	M2		0
425	Prov china mosiac waterproofing	Providing and laying intenral cement based water proofing treatment with China Mosaic finish including preparation of surface as required for treatment of roofs, balconies, terraces, RC gutters, etc. as per approved mehtodology	2.5	M2		0

426	P/A PVC membrane	Preparation & curing clean the surface & provide geotextile (minimum 300gsm). Provide PVC membrane (made of virgin PVC)alkor bright (minimum 1.5mm thick) over the surface &start placing from lowest point. Unroll the membrane half way align & fix themembrane 1st layer with the help of anchors & aluminium washers & adjacentlayer with hot air welding & applying unifrom pressure by roller/wet cloth toremove entrap air. Membranes to be fixed with aluminium strips at the end aboveparapet wall.	2.5	M2		0
427	Prov. Covering for windows	Providing, fixing & removing plywood (12mm to 20 mm thickness) covers of existing machine units/pump etc. (actual area of openings covered by plywood be measured.)	2.5	M2		0
428	Removal of loose concrete	Providing services for chipping of loose concrete from beams, columns, slabs & all other concrete surfaces to expose sound concrete beneath using light chisel & hammer & also preparing concrete surface to receive further treatment, disposing the debris as directed	2.5	M2		0
429	Removal of rust	Providing services for cleaning reinforcement of total rust by tapping or using wire brush or any other suitable way including from behind and around the reinforcement bars to give it a totally rust free finished steel surface. Measurement shall be on basis of repair surface area. Providing and applying approved chemical rust remover with paint brush and removing loose particles after 24 hours of its application. Measurement shall be on basis of	2	M2		0
430	corrosion inhibitor	Providing & applying corrosion inhibitor, the exposed reinforcing bars shall be cleaned thoroughly to remove corrosion scales using buffing wheel and emery cloth. The exposed surface shall be washed with water jet followed by applying two coats of anticorrosive chemical of approved brand on cleaned rebars as per manufacturers specification and directions of engineer-in-charge. (surface area of concrete treated will be measured for payment)	2	M2		0
431	Corrosion treatment	Corrosion Treatment :- Removing existing corrosion by means of mechanical wire brush on exposed surfaces of reinforcement, providing and applying Alkaline based Rust Converter RUST GUARD in single coat over the exposed rusted reinforcement as per the manufacturer specifications and instructions. Providing and Applying two coats of Zinc rich Primer on re-inforcement , STEEL GUARD at all heights etc complete.	2	M2		0
432	Treatment for separation cracks	Treatment For Separation Cracks :- Opening up the junction of brick work and beam / column, sealing the junction by metal packing/filling by polymer mortar, then overlaying the joints / crack by approved fibre sheet (strip) approx 200mm wide, applying bond coat of approved polymeric slurry before and after the fibre sheet is fixed over the joint (junction / crack) etc complete.	2	M		0
433	Crack filling	Providing material & treating cracks by filling , Cleaning the crack surface with the help of clean water, drying the surface in natural sun, providing & applying the bonding coat, providing & fixing fiber cloth 25mm to 50 mm width, filling the same with polymer putty, providing & applying 2 coats of acrylic polymer to that width of the surface cure natural for	2	M		0
434	Crack filling using polymer plaster	Carefully opening the cracks in plaster, cleaning the cracks with electrical air blower/water & filling the cracks with polymer modified cementitious mortar in proportion 1:5:15 (i.e. Polymer: cement: well graded quartz sand by wt.) including polymer bonding coat & seal coat, curing etc. complete. (Note: Width of cracks upto 6 mm and depth upto 20mm.)	2	M		0
435	PU sealant	Cleaning & filling the joints/gaps between the window with the help of PU Sealant of approved make etc complete in all respect from the both sides.	2	M		0

436	Epoxy bond coat	Providing and applying bond coat on the prepared surface to receive new polymer mortar/polymer modified concrete, with two components epoxy based bonding coat concresive 1414 of BASF/Nitobond ep of FISROC/ Fitbond EA of Conmix or equivalent material in one full coat. Laying of reinstatement polymer mortar or micro concrete shall be completed within the overlay time of bonding coat. Item rate inclusive of all man, material, transportation, tool etc.	2	M2		0
437	P/A Polymer plaster	Providing and applying of polymer modified mortar single component, alkaline resistant fibre reinforced, duel shrinkage-compensated, thixotropic, cementitious patch repair mortar as suitable material and finishing with trowel carefully compacting the same around the rebar's and finishing to bring it in line with existing concrete surface on the columns, beams & slabs etc., 25 mm thick polymer / latex modified	2	M2		0
438	P/L Micro concrete	Providing and laying of micro concrete, approved brand in proportion 1:1 with metal no.1 including mixing, waterproof shuttering, pouring, consolidating, scaffolding, curing as per MFG specifications, transportation at site, identification of leakage source, including dewatering of pits whenever required till completion of job etc complete as directed. (Measurement will be taken on consumption of micro concrete only, metal/aggregate will not be measured separately.)	2	KG		0
439	P/A prodecoat 0770	Providing and applying Prodecoat 0770 as per following methodology 1. Cleaning entire surface with high pressure water jet pump 2. Allow surface to dry 3. Open visible cracks in 5 mm * 5 mm width & depth. 4. Apply one coat of POLYSEAL-0724 in the opened cracks uniformly. 5. Allow it to dry for 4 Hours. 6. Fill the cracks with polymer sealant AQAUASEAL 7. Apply first coat of PRODECOAT- 0770 uniformly with brush or roller 8. Allow it dry for 60 minutes 9. Apply second coat of PRODECOAT-0770	2	M2		0
440	P/A Elastomeric paint	Providing & applying one coat of primer and two coats of elastomeric paint having an sel elangation upto 200 % applied to the surface at interval of not less than 6 hours to the approved shade and colour etc. complete. RAINGUARD .(,Providing & applying two coats of Elastomeric coating having 200-300% elongation over a coat of primer over properly prepared plaster surface including scrapping all loose material on existing plastered surface etc complete as	2	M2		0
441	FST 250	Providing & applying Expanded Foam (FST-Foam Duct Sealant 250) including Cartridge Set with Mixing Nozzle for any cable entry points gap filling work as directed by TATA power Engineer. The rate shall includes the cost of materials & associated	2	EA		0
442	Providing Service F/Hiring JCB	Hiring of JCB with fuel, operator and carrying out work as directed for 8 hours shift	0.5	SFT		0
443	Providing services of Crane 90 Ton	Providing service of 90 ton crane meeting all the requirement of tata power safety norm, rate should be quoted for 8 hr shift	0.2	SFT		0
444	Prov Services of Compressor Breaker	Prov. Services of compressor / tractor breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours shift	0.5	SFT		0
445	Prov. Services of JCB Breaker	Prov. Services of JCB breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours	0.5	SFT		0
446	Providing services of Ferrana	Providing service for hiring of Ferrana meeting all the requirement of Tata power safety norm, rate should be quoted for 8 hrs shift	1	SFT		0

447	Service for Hiring Tempo 10kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10	1	SFT		0
448	Service for Hiring Tempo 20kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20	1	SFT		0
449	Service for Hiring Tempo 30kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30	1	SFT		0
450	Services for Hiring Tempo 30-50 Kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50	1	SFT		0
451	Services for hiring Tata 407 10 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10 kms)	1	SFT		0
452	Services for hiring Tata 407 20 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20 kms)	1	SFT		0
453	Services for hiring Tata 407 30 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30 kms)	1	SFT		0
454	Serv. for hiring Tata 407 30-50 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50 kms)	1	SFT		0
455	Providing Concrete Pump	Prov. Services of concrete pump for grade up to M30 and distance up to 20 meter / height up to 10 meter	0.5	SFT		0
456	Providing 60 ft Manlifter(8 Hours)	Prov. Services of manlifter up to 60 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
457	Providing 60 ft Manlifter(4 Hours)	Prov. Services of manlifter up to 60 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
458	Providing 80 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 80 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
459	Providing 80 Ft Manlifter(4 Hours)	Prov. Services of manlifter up to 80 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
460	Providing 100 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 100 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
461	Providing 120 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 120 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
462	Providing 150 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 150 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
463	Prov. Diesel Operated Pump 2 HP	Prov. 2 HP submersible pump for dewatering of pits or other excavated space including diesel, transportation and operator service	0.5	SFT		0
464	P/F Scaffolding upto 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards upto 5 m height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of	2.5	M2		0
465	P/F Scaffolding Above 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards from 5 m & above height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per	2.5	M2		0

466	P/F Scaffolding at all Height	Providing and fixing of tubular h-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, as per Tata power standards including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of elevation	2.5	M3		0
467	Water Supply - Potable	Supplying potable water by tanker, rate shall be inclusive of pumping water up to 8 m height as and when required	2.5	KL		0
468	Water Supply - Boring	Supplying potable water tanker to ground level or below storage tank	2.5	KL		0
469	MAK&CUT CORE IN RCC WALL/SLAB,250MM	MAK&CUT CORE IN RCC WALL/SLAB,250MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of 160-200 mm diameter.	10	No		0
470	MAK&CUT CORE IN RCC WALL/SLAB,150MM	MAK&CUT CORE IN RCC WALL/SLAB,150MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of upto 100 diameter.	10	No		0
471	WPC Board	WPC board, Providing and fixing of WPC board, providing all equipment, material, tools, tackles etc for replacing and fixing panneling at all height.as directed by engineer in charge and approved from	15	M2		0
472	providing and fixing of Artifical green	providing and fixing of Artifical green turf wall cladding panels of make Glo panels. Quote shall include require ply backing, adhesives, tool, tackels etc required to complet the job in all respect. It will be prefered if the material used is LEED or IGBC certified	20	M2		0
473	P/F awning	providing and fixing AWNING of fix type including all necessary supports and fixing at site, stable outdoor weather proof inclduing trasportationat site, fixing at height with fixrures and fastening etc complete as directed.	15	M2		0
474	CISE,P/F services for Awning cloth repla	Providing & replacing the existing Awning cloth with new approved make cloth. Vendor should submit catalogue and take approval from Site In charge before procurement of the cloth. Rate shall include all tools, tackles, transportation, scaffolding, etc. required to carry out the works as directed by Site In Charge.	20	M2		0
475	PRVDNG&FIXING,VINYL FLOORING	SERVICE TYPE: PROVIDING AND FIXING OF VINYL FLOORING, MATERIAL: POLY VINYL CHLORIDE OF APPROPRIATE BY MIN THICK: 2 MM OF APPROVED QUALITY AND SHADE INCLUDING LEVELLING, CLEANING OF FLOOR SURFACE, LEVELLING WITH POP IF REQUIRED AND FIXING WITH RUBBER ADHESIVE AS PER MANUFACTURE SPECIFICATIONS INCLUDING CLEANING OF THE SURFACE AND HANDING OVER TO TATA POWER CO, APPROVAL SHALL BE TAKEN FOR SHADE AND THICKNESS OF VINYL FLOORING, CUTOUTS/OPENING WILL BE DEDUCTED	20	M2		0
Sub-Total						**0**
GST @ 18%						**0**
Total (Including GST)						**0**

Sr. No	Short Text	Description	Quantity for 1st year	UOM	1st Year	
					Rate (INR)	Amount(INR)
B. Civil work at Operational area						

1	Excavation 0-1.5 m, disposal inside	Excavation in all types of ordinary soils including dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 0 to 1.5 mtrs deep within basic lead of 100 mtr (rate does not include payment against royalty and debris management cell charges)	4	M3		0
2	Excavation 0-1.5 m disposal outside	Excavation from 0 to 1.5 meter in all types of ordinary soils (natural / backfilled) including dewatering and depositing / stacking of all materials, removal of wild growth vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth material to authorized dumping sites outside owner#s premises.	4	M3		0
3	Excavation 1.5-3 m, Disposal inside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials, removal of vegetation, backfilling with excavated earth in layers, well watered, compacted, transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs and unloading the excavated material to authorized dumping sites inside owner#s premises.	2.4	M3		0
4	Excavation 1.5-3 m Disposal outside	Excavation in all types of ordinary soils including shoring / strutting dewatering and depositing / stacking of all materials removal of vegetation backfilling with excavated earth in layers well watered compacted transporting of surplus excavated material for backfilling or stacking or spreading or removal of surplus excavated earth from 1.51 to 3.0 mtrs deep, rate shall be inclusive of dispoing surplus material to authorized dumping sites outside owner's premises.	2.4	M3		0
5	Collector permission for excavation	Obtaining collector permission for excavation for which tata power will provide the available documents. Official payment will be done by tata power on receipt demand note	5	M3		0
6	Excavn. in hard rock by JCB breaker	Prov. Services for excavation in hard rock using JCB breaker as directed by EIC and disposing debris outside tata power premises at authorized site outside owner's premises	2.4	M3		0
7	Prov. Cartage services	Providing cartage service & transporting, excavated soil, debris, bricks, concrete, dry garbage etc.and disposing off to municipal corporation area approved dumping sites outside premises incl submission of relevant documents. Note: measurement will be made on truck measurement.	5	M3		0
8	Backfilling with site material	Providing services for backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer with local earth available at	5	M3		0
9	Supplying & filling with murrum	Supplying good quality murrum free from gravels & boulders, backfilling in layers of 230mm. Consolidated to 150mm. Watering, compacting with tamping /hand rammer, excluding use of JCB as per instruction of EIC	5	M3		0
10	P/L dry rubble soling	Providing and laying dry rubble soling of basalt stone or black trap stone or locally available strong stones with approved quality stones including filling gaps with small chips ramming with hand rammer etc.	5	M3		0
11	Rubble soling with site material	Laying of rubble soling with material available at site within 50 m lead, rate shall be inclusive of man, shifting of material manually, laying as per line & level, filling interstices with small chips and laying layer of crushed sand or good quality murrum	5	M3		0
12	Demolishing brick masonry	Providing all necessary tools tackles services etc for demolishing brick masonry of variable thickness with plaster and disposing off the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	2.4	M3		0

13	Breaking PCC	Providing all necessary tools tackles services etc for demolishing PCC and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer., rate shall be inclusive of storing debris up to 200 m lead until taken for disposal	2.4	M3		0
14	Breaking pointing	Providing all necessary tools tackles services etc for breaking pointing and disposing of the debris to the approved dumping ground of municipal corporation area / outside owner premises etc complete as per specifications and as directed by the engineer	2.4	M3		0
15	Demolishing RCC	Providing all necessary tools tackles services etc for demolishing all types of RCC structures at floor level manually or by means of chipper breaker (exclusive of air compressor breaker / JCB breaker / Poclain breaker) including transportation of debris, cutting of reinforcement, disposing salable scrap material to the tata power stores etc. Complete as per the requirement of drawing and as directed by the site-engineer and disposing of the debris to the outside company premises etc complete	2.4	M3		0
16	Breaking cement / lime plaster	Providing all necessary tool tackles services etc for breaking plaster of all thicknesses as directed by the site-engineer and disposing of the debris to the approved dumping ground of municipal corporation outside company premises etc complete as per specifications and as directed by the engineer	4	M2		0
17	Breaking of asphalt road (BC & DBM)	Providing all necessary tools tackles services etc for breaking asphalt road and disposing of the debris to the approved dumping ground of municipal corporation area etc complete as per specifications and as directed by the engineer	4	M3		0
18	Breaking asphalt road incl. macadam	Providing all necessary tools tackles services etc for breaking asphalt road including macadam layer, soling etc. (all thickness) and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.,asphalt road including metalling, soling etc. (all thickness)	4	M3		0
19	Dismantling structural steel	Providing all necessary tools tackles & services for dismantling structural steel sections i.e. Angles / channels / beams / plates etc (not inclusive of ferrana / crane) & returning the same to nearest tata power stores or designated place etc complete as directed	2	MT		0
20	Removing Door / windows / louvers	Providing all necessary tools tackles services etc for removing all type of doors/windows in good condition & returning to the nearest tata power stores with necessary documentation etc. Complete as directed by the engineer	4	M2		0
21	Removing chainlink fencing	Providing services for removal of chain-link fencing including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever	25	M2		0
22	Removing Barbed wire	Providing services for removal of Barbed wire including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever	30	M		0
23	Removing concertina coil	Providing services for removal of concertina coil including handing over the salvaged material to tata power stores with proper documentation after completion of the job, including providing & erecting necessary steel tubular scaffolding (up to 2 meter) as per the tata power standards etc. Complete as directed. rate shall inclusive of providing necessary tools tackles, cutting set, welding set wherever	30	M		0

24	REMOVING OF AC/GI/FRP SHEET	Providing all necessary tools tackles & services for removing old AC / GI / FRP sheets from existing shed or boundary & returning to the tata power stores etc complete as directed	30	M2		0
25	Breaking of tile work	Providing all necessary tools tackles services etc for breaking of flooring & dado tiles as directed by the site-engineer and disposing of the debris to the outside company premises etc complete as per specifications and as directed by the engineer.	7.4	M2		0
26	DISMANTLING PARTITION	Providing services for dismantling aluminum / wooden / annealed glass / toughen glass partition at all heights & depositing it to tata power stores or scrap yard as directed by engineer	7.4	M2		0
27	Dismantling Gypsum Partition	Providing services for dismantling gypsum board partition at all heights including support structure & depositing it to tata power stores or scrap yard as directed by engineer	7.4	M2		0
28	Removing False ceiling incl support	Providing services for dismantling grid type / gypsum false ceiling including supporting arrangement, depositing saleable scrap to tata power stores & disposing remaining debris outside tata power premises at own risk.	7.4	M2		0
29	Dismantling false ceiling	Providing services for dismantling of false ceiling (grid & board type) excluding supports and disposing it outside tata power premises	7.5	M2		0
30	Dismantling of false flooring	Providing services for dismantling of false flooring including supporting arrangement using required tools and tackles and shifting it to tata power scrap yard	5	M2		0
31	DISMANTLING CONCEALED PLUMBING LINE	Providing services for dismantling concealed plumbing line of any dia, by breaking tile / plaster as required, depositing wastage to stores or as directed by EIC / reusing it at site	4	M		0
32	Removing PVC pipe line	Providing services for wall mounted / concealed sewage / drainage line, disposing material outside Tata power premises at approved dumping ground	5	M		0
33	Removing EWC	Providing services for removing floor mounted / wall mounted EWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit	1	EA		0
34	Removing IWC	Prov. Services for removing IWC of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at site so as to fit for use	1	EA		0
35	Removing wash basin	Prov. Services for removing counter top / wall mounted wash basin of any type and size from its support and disposing it outside tata power premises / reusing at site as directed by EIC, rate shall be inclusive of man, material, tools in case of reuse at	1	EA		0
36	Removing urinal	Prov. Services for removal of urinal and disposing it to outside tata power premises	1.5	EA		0
37	Removal of roller / vertical blinds	Prov. Services for removal of roller blind / venetian blind / vertical blind. Blinds must be removed with support channel & must stored in condition that it can be reused in as it is condition	5	M2		0
38	Demolishing kadappa / granite	Providing services for dismantling stone work such as kadappa / granite / marble or similar stone except kota, rate shall be inclusive of removal of mortar bedding if laid on kitchen platform & disposing outside tata power premises at designated local municipal authority dumping ground	7.5	M2		0
39	Dismantling railing	Providing servcies for dismantling any type of railing (SS / MS / GI ; single rail or double rail) and disposing it to tata power stores, rate shall be inclusive of man, material, tools such as gas cutting set / grinder cutter, shifting to stores so as to complete the job	2.5	M		0
40	Dismantling rolling shutter	Prov. Services for dismantling rolling shutter of any height & width including disposing it to tata power stores, payment for scaffolding to be paid extra if done more than 2 meter high	4	M2		0
41	Dismantling MS gate	Removing any type of ms gate and disposing it to stores scrap yard within 200 meter lead	4	M2		0

42	Removing & disposing paver block	Removal of existing paver blocks 60 - 80 mm thick & sand bedding and disposing outside tata power premises at designated local municipal authority	4	M2		0
43	Removing & stacking paver block	Removal of existing paver blocks 60 - 80 mm thick including sand bedding and stacking in owner premises within 200 meter lead	4	M2		0
44	Replacement of trench cover	Prov. Services for removal of existing trench cover and laying new trench cover, rate shall be inclusive of man, material, tools for replacement of trench cover but excluding of casting trench cover	5	EA		0
45	Prov. & laying PCC M-10	Supplying, providing and laying in position M - 10 plain cement concrete in levelling course/fill under or around foundations pits. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix	2.5	M3		0
46	Prov. & laying PCC M-15 (site mix)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mix /	0.6	M3		0
47	Prov. & laying PCC M-15 (RMC)	Supplying, providing and laying in position plain cement concrete M15 grade in levelling course/fill under or around foundations, over soling, column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	6	M3		0
48	Prov. & laying PCC M-20 (site mix)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using	6	M3		0
49	Prov. & laying PCC M-20 (RMC)	Supplying, providing and laying in position plain cement concrete M20 grade in levelling course/fill under or around foundations, over soling. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: RMC	4	M3		0
50	Prov. & laying PCC M-25 (site mix)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using site mixer	6	M3		0
51	Prov. & laying PCC M-25 (RMC)	Supplying, providing and laying in position plain cement concrete M25 grade in RCC column, beam, pedestal, footing. At any depth with 20 mm down graded coarse aggregates including curing, compacting, de-watering wherever necessary, providing shuttering form work wherever required etc. Complete for the following mixes: using RMC	6	M3		0
52	Prov. & replacing, precast RCC, M25	Providing and replacing of precast reinforced cement concrete structure, grade: M25, max w/c ratio: 0.5, rate to include shuttering, vibrating, machine mixing, providing lifting arrangement, placing insert curing handling, transporting with down graded aggregate: 20 mm	5	M3		0

53	Prov. & laying PCC M-30 (RMC)	Supplying, providing and placing in position reinforced cement concrete of grade M30 with 20mm down graded aggregate for works below grade levels including vibrating, curing, de-watering wherever necessary, providing construction joints, leaving cut outs / pockets, placing of inserts/ embedment, etc., complete, including cost of providing, fixing and removing form work for all shapes (including scaffolding, centering etc) but excluding cost of providing reinforcement as directed by the engineer	4	M3		0
54	P/ L M-25 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M25 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	2.5	M3		0
55	P/ L M-20 concrete for trench cover	Supplying, providing and laying in position plain cement concrete M20 grade in RCC trench cover with 20 mm down graded coarse aggregates including curing, compacting, providing shuttering form work wherever required etc. Complete using site mix	2.5	M3		0
56	Prov. & laying plum concrete M - 15	Providing and placing in position plum concrete of required thickness, at all depths with 33% boulders of size 150mm to 230mm and 67% ready mix concrete of M15 grade including shuttering, vibrating, compacting, curing, dewatering, levelling, finishing, removal of formwork, etc. Complete as per specifications/drawings and as directed by the	2.5	M3		0
57	Prvov. & const. Brick masonry 230mm	Providing all material and constructing brick masonry 230mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	2.5	M3		0
58	Prov. & const Brick Masonry 115mm	Providing all material and constructing brick masonry 115mm. Thick and above in cement mortar (1:5) using approved quality class 35 conforming to IS 1077 : 1992 table molded bricks, including scaffolding, curing, raking joints, etc. Complete as per specifications & drawings at all levels & locations.	2.5	M2		0
59	P/L uncoursed rubble masonry	Supplying, providing and laying, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer.	2.5	M3		0
60	Laying UCR masonry - rubble at site	Prov. Services for laying including tools tackles, un-coursed random rubble masonry in cement mortar 1:5 with approved local stones of good quality for wall footings, etc. And as fill under foundations, including curing, de-watering wherever necessary, etc. Complete for work below ground/grade level at all depths and grade level up to plinth etc., complete as per specification and as directed by the engineer., rubble to be brought from 50 m lead	2.5	M3		0
61	P/L pitching stone work	Providing all material for dry stone pitching : providing all the materials and laying 225 mm thick. Dry rubble pitching at all heights to correct line and level dry stone pitching with individual stones of 22 cm depth and minimum size 0.014cum. Complete with all leads and lifts for all materials and machinery including all charges and as directed by engineer-in-	2.5	M2		0
62	CLC/AAC/Siporex block masonry - 4"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness - 100 mm)	2.5	M2		0
63	CLC/AAC/Siporex block masonry - 8"	P/l CLC / AAC / SIPOREX block masonry of required thickness, rate shall be inclusive of man, brick joining adhesive mortar, shifting to required floor, finished in line level as directed by EIC (thickness # 200 mm)	2.5	M2		0

64	Making pocket, 300x300x150mm	Making of pocket, size:300 x 300 x 150 mm, at all levels with staging including grouting with cm 1:3 in concrete/masonry, debris must be disposed outside owner's premises at municipal corporation approved dumping yard	2.5	EA		0
65	P/A Internal plaster 12 mm	Providing 12mm. Thick smooth finished cement plaster in cement mortar (1:3) for RCC, brick work, sides and undersides of the slabs, canopies, chajjas with drip molding etc. Including scaffolding, curing, etc. Complete as per specifications.	5	M2		0
66	P/A external plaster 20mm	Providing all materials and carrying out sand faced plaster 20 mm thick in two layers (first layer of 14 mm and second layer of 6 mm thickness) with waterproofing compound. Including bands drip molds in cement mortar 1:4 including scaffolding (the rates shall include provision for chicken mesh 230 mm wide at the junction of masonry with RCC).	5	M2		0
67	P/A ready mix plaster - 20 mm	Prov. & applying ready mix plaster of Godrej make tuff Duro Plast / ACC make Suraksha ready to use plaster 101 or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, application and finishing of surface, curing	5	M2		0
68	P/A Raised or flush cement pointing	Providing all the materials and carrying out raised or flush cement pointing in 1:3 cement mortar including providing and erecting steel scaffolding (up to 2 meter), curing, edge finishing	5	M2		0
69	P/L IPS flooring- 75 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete including as per line & level required, finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 75 mm thick	5	M2		0
70	P/L IPS flooring- 50 mm thick	Providing all the tools tackles, manpower and materials for laying IPS flooring in panels in m20 grade concrete as per line & level required, including finishing the surface and curing etc. Complete as directed with glass strips in panels of 2 x 2 feet for following thickness: average 50 mm thick	5	M2		0
71	P/L floor tiles (800 x 800)	Providing and fixing 800 x 800 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and jointed with tile grout of ROFF / equivalent make, cutting of tiles to required size, cleaning, curing, etc. Complete.	2.5	M2		0
72	P/L floor tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette in flooring, on an average 50 mm thick bedding of 1:3 cement mortar and filling joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning, curing, etc. Complete.	7.5	M2		0
73	P/L wall tiles (600 x 600)	Providing and fixing 600 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning,	4	M2		0
74	P/L wall tiles (300 x 600)	Providing and fixing 300 x 600 of NITCO / Kajaria / Johnson approved quality and shade as per AOC palette on wall, fixed using 1:1 cement sand mortar and filling up joints with tile grout of ROFF or equivalent, cutting of tiles to required size, cleaning,	2.5	M2		0
75	P/L acid resistant tiles	Providing all materials, tools, tackles & services for supplying & fixing acid resistant tiles. Scope includes 1) applying epoxy primer & allow it dry for 24 hr. 2) fixing the tiles by applying 5-8 mm thick paste made up from mixture of VIKO proof-SDK cement powder or equivalent sodium silicate cement powder & VIKO proof-SDK liquid binder or equivalent liquid binder in proportion of 1:3. 3) joints & gaps to be filled with VIKO proof ep-epoxy resin cement or equivalent acid resistant cement.	5	M2		0

76	P/L tile on existing tile-vitrified	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive up to 10 mm thick layer for vitrified tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent	2.5	M2		0
77	P/L tile on existing tile (ceramic)	Prov. & laying vitrified tile on existing tile using ROFF / MYK Laticrete make or equivalent tile adhesive upto 10 mm thickness for ceramic tile, rate shall be inclusive of hacking of base tiles, man, material, transportation, wastage, cutting of tiles and laying as per line and level, filling joints with ROFF / equivalent	2.5	M2		0
78	P/F kota stone ,25mm thick	Providing and fixing at least 25 mm thick machine cut machine cut kota stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	6.5	M2		0
79	P/F white marble,15mm	Providing and fixing at least 15 mm thick machine cut machine cut white spotless marble stone of any sizes for windows / door jambs / lintel / sill with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	2.5	M2		0
80	P/F black granite stone,15mm	Providing and fixing at least 15 mm thick machine cut machine polished pitch black granite stone of any sizes for counter / cooking/platform with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, full bull nose or double bull nose molding & polishing of edges & redoing in cm	2.5	M2		0
81	P/F Baroda green stone 15 mm	Providing and fixing at least 15 mm thick machine cut machine cut Baroda green stone of any sizes for flooring/windows / door jambs / lintel / sill etc with necessary cement mortar bedding and floating with matching colour cement, curing, polishing, cleaning etc or cutting grooves in walls, demi bull nose / standard / bevel molding & polishing of edges & redoing in cm (1:3) complete.	2.5	M2		0
82	Mirror polishing of kota/mosaic	P/s for mirror polishing of kota / mosiac flooring preceded by machine polish to bring level on joints and edges if required	4	M2		0
83	P/L Granite for sill / staircase	Providing and fixing 15 mm thick black granite on window sill, staircase tread & riser, 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of marble, raking and finishing the joints with silicon sealant, curing, rubbing, polishing and cleaning complete at all levels 2nos in steps with minimum 50mm overlapping and maximum of 300mm width in combination.	2.5	M		0
84	Edge molding	Prov. Services for molding of edge - bull nose or demi bull nose for all type of stones	2.5	M		0
85	P/F Paver block - 60 mm	Providing and fixing interlocking concrete paver blocks of 60mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties,	2.5	M2		0

86	P/F paver block - 80 mm	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties,	2.5	M2		0
87	Lay paver block available at site	Prov. Services for laying paver blocks available at site within 50 meter lead, rate shall be inclusive of shifting or transporting for given lead, 40 mm thick sand bedding, filling joints with sand	2.5	M2		0
88	P/F M 30 - 100 mm paver block	Providing and fixing interlocking concrete paver blocks of 80mm thick. Concrete paver blocks shall be uniformly shaped (monolithic single layer precast concrete blocks) of specified color and pattern, placed on avg. Thickness of 45 mm river / crushed sand cushioning with proper compacting with mechanical compactor with the proper level, grade & camber etc. The side joints should be filled by M-20 grade concrete if required etc. Including all taxes, duties,	2.5	M2		0
89	Prov. & fixing kerb stone M 20	Prov. & fixing kerb stone of size 150 x 300 mm made of M20 grade of concrete conforming to is 5758 (1994) (type 1d), rate shall be inclusive of man, material, transportation, hacking / breaking of PCC / asphalt, laying mortar (1:1) bedding to line and level, cutting / breaking of kerb stone to size and finishing joints with neat cement, housekeeping and disposal of debris outside tata power premises	2.5	M		0
90	P/L paver tile 20 mm	Prov. & laying 20 mm thick paver tile of M 20 grade on average sand bedding of 50 mm thickness to the line and level, rate shall be inclusive of man, material, transportation, tools, joint filling with sand so as to complete the job	2.5	M2		0
91	Sup/Fab/Placing Reinforcement Steel	Providing & binding reinforcement steel of any dia including binding wires, cleaning, bending, cutting, hoisting, placing in position, lapping and binding with 16 SWG annealed soft iron wire or tack welding reinforcement steel for all types of RCC work irrespective of locations & levels all as per drawings including handling and transporting steel from nearest stores to site complete as directed for HYSD bars.(FE-500 conforming to IS code 1786-1985).	1	MT		0
92	Fab & Erect Structural Steel Work	Fab & erection all types of mild steel, work at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel	1.5	MT		0
93	Prov./ Supply /Fab structural steel	Providing & fabricating & erecting all types of structural steel, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of	2.5	MT		0
94	Fab & Erect GI Work	Fab & erection all types of GI work, at all height including scaffolding (upto 2 m), welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply and fixing of mild steel bolt, nut, washer and applying one coat approved primer & 2 coat of approved synthetic enamel paint to all the exposed surfaces of steel	0.5	MT		0

95	Prov/Supply/Fab Structural Steel#GI	Providing & fabricating & erecting all types of GI material, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of	1	MT		0
96	P/F 16 SWG SS Wire Mesh	Providing all tools, tackles, materials for fixing of 16 SWG SS wire mesh of opening size 12.5 mm x 12.5 mm fixed with 12 mm U bolts as mentioned in the drawing or as directed by EIC at any height incl scaffolding, ladder, machinery etc.	2.5	M2		0
97	P/F/E Structural Steel(Tube & pipe)	Providing & fabricating & erecting all types of MS tubes & pipes, work at all height incl. scaffolding (upto 2 meter), welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of primer & 2 coats of approved synthetic enamel paint to all the exposed surfaces of	0.5	TO		0
98	P/F MS Chequered Plate - 6 mm	Providing & fabricating & placing MS chequered plate - 6 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of	2.5	M2		0
99	P/F MS Chequered Plate - 8 mm	Providing & fabricating & placing MS chequered plate - 8 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of	5	M2		0
100	P/F MS Chequered Plate - 10 mm	Providing & fabricating & placing MS chequered plate - 10 mm thick, welding & gas cutting, drilling of hole, with own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine, required for carrying out the entire work, the rate shall include supply & fixing of mild steel bolt, nut, washer & applying one coat of shalimar or any other approved make red oxide (primer) paint & two coat of approved synthetic enamel paint to all the exposed surfaces of	5	M2		0
101	P/F MS Grill	Providing, fabricating and erecting MS grills consisting of 12mm square rods with external frame of 20x6mm flats with safety flip door including applying one coat of primer & 2 coats of enamel paint to all the exposed surfaces of steel. Design will be as per AOC palette. All the required steel will be supplied by contractor. Contractor shall use his own welding set, gas cutting set with accessories, gas and electrodes to complete the entire work, as per the direction etc complete	2.5	M2		0
102	P/F GI Grating	Supplying and laying of grating, material: hot dip galvanized iron and providing all necessary material, tools, tackles & services, outer frame plate size: 40 x 6mm, short span plate size: 40 x 5 mm, bracing plate size: 40 x 5 mm and spacing of plate size: 40 mm	2.5	MT		0
103	P/F/E Al Chequered Plate 8 mm	Providing & fixing aluminum chequered plate of 8 mm thick with lifting arrangement cut provided as directed by EIC,	2.5	M2		0
104	P/F/E Al Chequered Plate 10 mm	Providing & fixing aluminum chequered plate of 10 mm thick with lifting arrangement cut provided as directed by EIC,	2.5	M2		0

105	P/F/E GI Tubular Handrail 2 Rail	Supplying, fabricating & erecting C class GI tubular h&railing of 32 mm dia. Nb medium class, consisting of double GI rail with top GI rail 1 mtr above floor level, mid rail at 600 mm from floor & pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary bends, GI tee joints, GI fixtures, GI fittings, 100 mm x 6 mm toe guard including applying one coat of primer & two coats of synthetic enamel excluding anchor fastener	2.5	M		0
106	P/F/E Single Rail C Class GI Pipe	Providing & fixing single handrail of C class GI pipe of 32 mm dia and connecting with wall with all necessary GI bends, GI tee joints, GI fixtures such as plate for connection at wall, the assembly should be sturdy and with smooth surfaces at joints/ junctions.	2.5	M		0
107	P/F/E Tubular Handrail - SS 2 Rail	SS pipes 304 mat finish /brush steel finish ss tabular handrailing consisting of double SS rail with top SS rail 1 mtr above floor level and pipe post including its own connecting plate at bottom spaced at not more than 2 mtrs with all necessary SS bends, SS tee joints, SS fixtures, SS fittings,100 mm x 6 mm ss toe guard excluding anchor fastener as directed as directed by engineer	2.5	M		0
108	P/F/E Tubular Handrail - SS 1 Rail	SS pipes 304 mat finish /brush steel finish consisting of one SS rail and connecting with wall with all necessary SS bends, SS tee joints, SS fixtures, SS fittings, the assembly should be sturdy and with smooth surfaces at joints/ junctions. All SS sections, pipes etc to be supported with documents for the quality	2.5	M		0
109	P/F/E SS Hand Rail - 4 Rail	Providing & fixing SS hand rail made of SS 304 satin finish of 1.5 mm thickness, with top rail of SS hollow pipe 50 mm dia and bottom 3 made of SS hollow pipe of 25 mm dia, supported by 50 mm dia @ 1.2 m c/c using bracket as per AOC palette, including cutting, bend, finishing of joints & bends, installation using required screws so as to complete the job	2.5	M		0
110	P/F/E MS Gate - Chainlink	Providing & fabrication of MS gate in single / double leaf with ISA 65 x 65 x 6 mm angle frame, both side MS flat of 10 mm x 6 mm to hold chainlink, 9 gauge chainlink within frame and painted by 2 coats of synthetic enamel preceded by red oxide primer, including hinges, MS aldrop, welding, gas cutting,	2.5	M2		0
111	P/F/E Square Pipe MS Gate	Providing ,fabricating & erecting in position gate made of hollow box section as per the approved drawing using steel confirming to IS 2062/IS:1161 including supply of all materials such as hinges, locking arrangement, plunger bolts, SS wheels & fixtures, MS flat plate for wheels with anchors, making of wicket gate ,vision panel etc incl. of 2 coats of synthetic enamel paint with one coat of primer. (outer frame 90 x 60 x 3 mm, inner pipes - 25 x 25 x 3 mm, 3 nos. 100	1.25	M2		0
112	P/F/E 3mm Thick GI Perforated Sheet	Providing & fixing 3 mm thick GI perforated sheet with 50% opening holes, rate shall be inclusive of man, material, transportation, installation of sheet using tack weld or nut bolt as per site requirements, wastage and fixing sheet to line, level and alignment	2.5	M2		0
113	P/F pin type Anchor Fastener,16mm	Providing & fixing 16 mm dia, 100 mm long pin type anchor fasteners, including drilling the holes (other than HILTI)	7.5	NO		0
114	Anchor Fastener-HILTI HSA 12X100 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 100, rate shall be inclusive of drilling & fixing	2.5	NO		0
115	Anchor Fastener-HILTI HSA 12X145 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 145, rate shall be inclusive of drilling & fixing	2.5	NO		0
116	Anchor Fastener-HILTI HSA 12X175 mm	Providing & fixing HILTI make anchor fastener HSA 12 x 175, rate shall be inclusive of drilling & fixing	2.5	NO		0
117	Anchor Fastener-HILTI HSA 16X102 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 102, rate shall be inclusive of drilling & fixing	2.5	NO		0
118	Anchor Fastener-HILTI HSA 16X137 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 137, rate shall be inclusive of drilling & fixing	2.5	NO		0
119	Anchor Fastener-HILTI HSA 16X182 mm	Providing & fixing HILTI make anchor fastener HSA 16 x 182, rate shall be inclusive of drilling & fixing	2.5	NO		0
120	Anchor Fastener-HILTI HST2-R 12x105	Providing & fixing HILTI make anchor fastener HST2-R 12 x 105, rate shall be inclusive of drilling & fixing	2.5	NO		0
121	Anchor Fastener-HILTI HST2-R 12x145	Providing & fixing HILTI make anchor fastener HST2-R 12 x 145, rate shall be inclusive of drilling & fixing	2.5	NO		0

122	Anchor Fastener-HILTI HST2-R 16x140	Providing & fixing HILTI make anchor fastener HST2-R 16 x 140, rate shall be inclusive of drilling & fixing	2.5	NO		0
123	Anchor Fastener-HILTI HST2-R 16x170	Providing & fixing HILTI make anchor fastener HST2-R 16 x 170, rate shall be inclusive of drilling & fixing	2.5	NO		0
124	P/L Manhole Cover (LD 2.5) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	0.7	EA		0
125	P/L Manhole Cover (LD 2.5) 450X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 450 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	0.7	EA		0
126	P/L Manhole Cover (MD - 10) 450X600	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 450 x 600 (medium duty 10 category), rate shall be inclusive of man, material, transportation and placing along with ring and	0.7	EA		0
127	P/L Manhole Cover (HD - 20) 900X450	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 900 x 450 (heavy duty 20 category), rate shall be inclusive of man, material, transportation and placing along with ring and	0.7	EA		0
128	P/L Manhole Cover 300 X 300	Providing & laying manhole cover conforming to IS 1726 : 1991 of size 300 x 300 (light duty 2.5 category), rate shall be inclusive of man, material, transportation and placing along with ring and masonry finishing	0.7	EA		0
129	Replacement of Hinge of MS Gate 6"	Providing & replacing of hinge of gate, material: 6 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by enGIneer incharge.	1.5	EA		0
130	Replacement of Hinge of MS Gate 4"	Providing & replacing of hinge of gate, material: 4 inch square hinge mild steel at all levels and heights, rate is inclusive of providing all tools and tackles, material whatever required for successful completion of work & as directed by engineer in charge.	1.5	EA		0
131	Ser. F/Greasing - Rolling Shutter	Providing material, labor and service for oiling and greasing of shutter, rates are inclusive of providing scaffolding	1	M2		0
132	Making Wicked Gate - Rolling Shutter	Providing all tools and tackles for making wicked gate in existing shutter at all levels and height, rate is inclusive of cutting, welding, all required material and	0.6	M2		0
133	Repairing Gear Operator Shutter	Repairing steel rolling shutters of gear operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc. Complete.	1	M2		0
134	Repairing Hand Operator Shutter	Repairing steel rolling shutters of hand operating mechanism. Types using 20G MS interlocking laths including hood and all accessories required and providing with two coats synthetic enamel paint of approved make over one coats of zinc rich primer etc. Complete.	1	M2		0
135	P/F Rolling Shutter Motor - 1 KV	Providing and fixing of electric motor of set 1KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	0.5	EA		0
136	P/F Rolling Shutter Motor - 1.5 KV	Providing and fixing of electric motor of set 1.5 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall include loading ,transportation and unloading of materials at site or as directed by EIC	0.5	EA		0
137	P/F Rolling Shutter Motor - 2 KV	Providing and fixing of electric motor of set 2 KV of approved make including arranging all necessary materials ,connecting rod with the existing rolling shutter and all electrical works required for functioning of rolling shutter. Rate shall includes loading ,transportation and unloading of materials at site or as directed by EIC	0.5	EA		0

138	P/F Rolling Shutter	Providing and fixing mechanically operated rolling steel shutters fabricated from 18G GI sheets with slide guides, bottom rail, brackets, door suspension shaft, housing box at operation arrangement, lock plates, locking arrangement, fixing bolts, pulling handles, hood, rolling arrangement & 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. wicket gate shall be paid under separate item, in that case area of wicket gate shall be deducted from this item for payment.	1	M2		0
139	Ser. for fab work- incl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, gas cutting set including gas consumption, all tools and tackles required for performing the fabrication job	0.5	DAY		0
140	Ser. for fab work- excl gas cutting	Providing service for fabrication work including welding rod, grinder cutter, manpower, all tools and tackles required for performing the fabrication job	0.5	DAY		0
141	P/F/E Tray C- 150 Mm	Providing, fabricating and erecting of tray c shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 150 mm	2.5	M		0
142	P/F/E Tray C- 300 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 300 mm	2.5	M		0
143	P/F/E Tray C- 450 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 450 mm	2.5	M		0
144	P/F/E Tray C- 600 Mm	Providing, fabricating and erecting of tray C shape, material: galvanized iron, any size and supplying all material, at all heights including steel scaffolding, welding and gas cutting, drilling of hole, contractor shall use his own welding set, gas cutting set, gas, approved quality of welding electrode, drill machine and other accessories, required for carrying out the entire work, the rate shall include supply and fixing of galvanized iron bolt, nut and washer: 600 mm	2.5	M		0
145	Serv. Stretching chainlink fencing	Providing Services for stretching chain link fencing at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the	5	M2		0
146	Serv. for Stretching barbed wire	Providing Services for stretching barbed wire at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the	15	M		0
147	Serv for stretching concertina coil	Providing Services for stretching concertina coil at all height, rate shall be inclusive of man, scaffolding up to 2 m, split pin of 16 gauge, shifting chain link within 200 m lead and stretching tools so as to complete the	5	M		0
148	P/S GI chainlink fencing- 8 gauge	Providing & stretching GI chain link fencing of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter, including one coat of zinc primer and followed by two coats of synthetic enamel	5	M2		0
149	Prov./strech PVC coated chainlink	Providing & stretching PVC coated chain link fencing of bare GI chain link of 8 gauge at all height, rate shall be inclusive of man, material, split pin, making hole in angle to receive pin, scaffolding up to 4 meter	5	M2		0

150	Providing & fixing barbed wire	Providing & stretching IOWA type GI barbed wire conforming to IS 278: 2009 with 14 SWG x 14 SWG (main wire & barb wire) with spacing of barb at max. 5 inch c/c at required line & level including man, material & transportation	15	M		0
151	P/stretch concertina coil 610mm dia	Providing & stretching concertina coil PVC coated / GI concertina coil 610 mm having medium barbs of 20 mm width, max 8 circle of coil per meter, guided by 16 SWG guide wire on both sides, including transportation, manpower, cutting - lifting & placing	5	M		0
152	P/F galvalume sheet 0.5 mm thick	Providing, placing & fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coat thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, zinc aluminum alloy coated (zinc aluminum coating not less than 150g/sqm), MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting & SMP coating of DFT 5 microns over 5 micron primer	7.5	M2		0
153	P/F Galvalume sheet 0.65 mm thick	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.65 mm total coated thickness to match existing shade (bare galvalume thickness 0.6mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	7.5	M2		0
154	P/F Precoated Galvanized Iron sheet	Providing, placing and fixing profile pre-color coated galvalume sheets or equivalent of 0.50mm total coated thickness to match existing shade (bare galvalume thickness 0.47mm), trough type, MS high tensile sheet having minimum yield strength of 550mpa including silicon modified polyester (SMP) coating of DFT 20 microns over 5 microns primer on exposed surface of sheeting and SMP coating of DFT 5 microns over 5 micron primer on internal surface of sheeting incl. J bolt / screw for installation	7.5	M2		0
155	P/F Al patti 50 mm	Providing & fixing aluminum flat of 50 x 6 mm on roof sheet, rate shall be inclusive of man, material, GI threaded screw with rubber washer, drilling hole @ 2m c/c	2.5	M		0
156	P/F GI corrugate sheet , 16 gauge	Gi sheet providing & fixing 16 gauge corrugated GI sheet on roof & cladding with GI bolts, nuts, washers, sealant on bolt etc. complete as directed.	1.5	M2		0
157	P/F 3 mm thick FRP sheet, plain	Providing & fixing 3 mm thick plain FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	1.5	M2		0
158	P/F 3mm thick FRP sheet, corrugated	Providing & fixing 3 mm thick corrugate FRP sheet with nut bolt, j hook washer, cutting, wastage, disposal of waste material,	1.5	M2		0
159	Fixing of GI / Galvalume/FRP sheet	Providing all necessary tools tackles & services for fixing GI / galvalume/FRP sheets, rates shall be inclusive of manpower, tools, tackles, scaffolding (up to 4 meter) self tapping polymer coated screw with rubber washer / j bolt with washer & nut, shifting lead	2.5	M2		0
160	Supply of tarpaulin sheet	Supplying only of tarpauline sheet of 200 GSM of any size and shade as directed by engineer in charge. Rate shall include the cost of transportation, loading, shifting and unloading of material at site and handing over the material to person designated by respective division in charge with documentation. this item is exclusive of spreading of tarpaulin sheet.	2.5	M2		0
161	Spreading of tarpaulin sheet	Providing services for spreading of tarpaulin sheet of 200gsm at any height/sheet/terrace inclusive of making tying arrangement using 12mm polypropylene/nylon rope, rate shall be inclusive of man, material, transportation, ladder, scaffold to complete the job, payment will be made against area covered by tarpaulin, not the area of tarpaulin sheet used. Tarpaulin sheet supplied by tata power.	2.5	M2		0

162	P/F monsoon shed of tarpaulin sheet	Providing all tools, tackles and material for erecting monsoon shed for a period of 05(five) months and maintaining the same for the period. Bamboo frame work shall be made for laying 200 GSM tarpaulin sheet shed with vertical supports max. 1.00 m c/c & lateral support at max. 1.00 m c/c. All vertical supports should be of approx. 60 mm to 80 mm dia. The rate shall also include dismantling of the monsoon shed. The rate also includes obtaining necessary	7.5	M2		0
163	P/F PVC gutter 7 inch	Providing and fixing half round 180 mm uPVC gutter with rubber seal SWR grade-prince or equivalent make inclusive of joint brackets/running outlet/elbows/short stop end/stop end outlet/support bracket/pipe clamp or clamp/side or top bracket rate shall be quoted for man, material, transportation, scaffolding (up to 4 m), machine,	1.5	M		0
164	P/F Wall Mounted EWC - Office WR(1)	Providing & fixing wall mounted EWC Hindware make studio series windsor (cat no. 20061) or Parryware make indus walvit series (C0255)	0.5	EA		0
165	P/F Wall Mounted EWC- Office WR(2)	Providing & fixing wall mounted EWC of Jaquar make DRS - WHT - 37591 or ARS - WHT - 39951UFSM along with slim seat cover with soft closer, bracket, finishing the side with near white cement	0.5	EA		0
166	P/F Floor Mounted EWC	Providing & fixing floor mounted EWC Hindware make universal series (20012) or Parryware make c0271 /	0.5	EA		0
167	P/F IWC	Providing & fixing Indian WC Orrisa pan popular (Hindware make -- 20043) or orrisa pan c0117 (Parryware make)	0.5	EA		0
168	P/F Urinal (Opt 1)	Providing & fixing urinal Hindware make cat no. 60011 or Parryware make new magnum c0575	0.4	EA		0
169	P/F Urinal - (Opt 2)	Providing & fixing Urinal Hindware make Corto standard (Cat no. 60022), rate shall be inclusive of man, material, tools, bracket, connection with plumbing & drainage line so as to complete the job	0.4	EA		0
170	P/F Wall Mounted Wash Basin	Providing & fixing wall mounted washbasin Hindware make studio series (Cat no. 10096) along with bracket, connections with plumbing & drainage line using applicable flexible hose & pipe	0.5	EA		0
171	P/F Under Counter Rim Wash Basin	Providing & fixing Hindware make under counter washbasin (cat no. 10065) or Parryware make c0419, along with CP coupling	0.5	EA		0
172	P/F Counter Top Wash Basin (Jaquar)	Providing & fixing Counter top wash basin Jaquar make - JDS - WHT - 25935, rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	0.5	EA		0
173	P/F Counter Top Washbasin(Hindware)	Providing & fixing Counter top wash basin Hindware make monalisa over counter basin (cat no. 10069), rate shall be inclusive of man, material, tools, transportation, fixing plumbing accessories and finishing with white cement so as to complete the job	0.5	EA		0
174	P/F Flush Tank	Providing & fixing Hindware make sleek elegance dual flush tank	0.5	EA		0
175	P/F Concealed Flush Tank	Providing & fixing concealed flush tank Hindware make concealo 80 mm (508179) or Parryware Linea 80 mm C8114	0.5	EA		0
176	P/F Health Faucet	Providing & fixing health facuet of Hindware make flora series cat no. F160023 or Jaquar make allied series ALD 573	1	EA		0
177	P/F Jet Spray	Providing & fixing JET SPRAY of 12 mm dia and fixing it on WC seat	1	EA		0
178	P/F EWC Seat Cover	Providing & fixing Hindware make white color EWC seat cover as per required size	0.5	EA		0
179	P/F S.S. Sink	Providing & fixing Nirali make SS sink elegance popular series	0.5	EA		0
180	Prov. & Fix CP Floor Trap - 100 mm	Providing & fixing CP floor trap 100 mm dia with interlocking plate mounted on floor	1	EA		0
181	Prov & Fix PVC Nahani Trap - 100 mm	Providing & fixing PVC nahani trap 4 inch,	1	EA		0
182	P/F Nahani Trap 3	Providing & fixing 100 mm dia 3 way PVC nahani trap	1	EA		0
183	P/F Nahani Trap 4	Providing & fixing 100 mm dia 4 way PVC nahani trap	1	EA		0
184	P/F Bib Cock	Providing & fixing CP concealed bib cock Hindware made F 280002 or Jaquar make FLR 5041 along with its flange cap	1	EA		0

185	P/F Stop Cock	Providing & fixing CP concealed stop cock Hindware made F 280004	1	EA		0
186	P/F Angle Cock	Providing & fixing Angle cock Jaquar make FLR CHR 5053N	1	EA		0
187	P/F 2 Way Bib Cock	Providing & fixing 2 way bib cock Jaquar make FLR 5041 n or Hindware make F280003	1	EA		0
188	P/F Pillar Cock	Providing & fixing Hindware make pillar cock f280001 or Jaquar make FLR 5015	1	EA		0
189	P/F Pillar Cock Tall	Providing & fixing tall pillar cock Jaquar / Hindware make as per approved AOC palette (Jaquar make F460002CP / Hindware make F400005CP)	1	EA		0
190	P/F Sink Cock	Providing & fixing CP sink cock Jaquar make FLR 5009b or Hindware make f280026	1	EA		0
191	P/F Flush Valve 32mm	Providing & fixing flush valve 32 mm flow size Jaquar make FLV 1085 sq with concealed body & cover plate	1	EA		0
192	P/F Flush Valve 40mm	Providing & fixing flush valve 40 mm flow size Jaquar make FLV 1089 sq with concealed body & cover plate	1	EA		0
193	P/F Urinal Flush Valve	Providing & fixing Urinal flush valve PRS - CHR - 073 including cover plate	1	EA		0
194	P/F CP Bottle Trap,31mm	Providing & fixing 31 mm bottle trap of Jaquar make allied series ALD 769 or Hindware make flora series f850015	1	EA		0
195	P/F Overhead Shower With Mixer	Providing fixing overhead shower, code: cat. No. Ohs 1709 round shape single flow with air effect abs body & face plate chrome plated rubit cleaning system, single lever shower mixer code: FLR CHR 5123, shower arm: code: sha 479l300 round shape with 90º bend for wall mounted showers with flange	0.5	EA		0
196	P/F Bath Tub Spout	Providing & fixing Jaquar make bath tub spout SPJ 15429, rate shall be inclusive of concealed body, man, material tools, transportation required to carry out the job so as to fir for use"	0.5	EA		0
197	P/F Diverter in Washroom	Providing & fixing single liver concealed diverter body Jaquar make ALD - 055, with exposed part kit FON - 40055K	0.5	EA		0
198	P/F ovrhead Shower	PROVIDING AND FIXING OF CHROME PLATED SHOWER, DIAMETER: 100 MM of Jaquar- Code-OHS 1709 WITH LONG ARM code SHA-479 L450	1	EA		0
199	P/F Waste Coupling	Providing & fixing waste coupling Jaquar make 32 mm dia ALD - CHR - 705L130	1.5	EA		0
200	P/F Flexible Pipe	Providing & fixing flexible pipe 32 mm dia	1.5	EA		0
201	P/F Hose Pipe	Providing & fixing PVC hose pipe of 12 mm dia including connecting with plumbing fixtures	1.5	EA		0
202	P/F Foot Operated Tap	Providing & fixing Jaquar exposed foot operated valve PRS-STL-033EF	1	EA		0
203	P/F Double Coat Hook	Providing & fixing Double coat hook Jaquar make AKP-CHR-35761P	1	EA		0
204	P/F Grab Bar - 600 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1507 (600 mm long)	1	EA		0
205	P/F Grab Bar 450 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1503 (450 mm long)	1	EA		0
206	P/F Grab Bar 300 Mm	Providing & fixing grab bar Jaquar make AHS - CHR - 1501 or AKP-CHR- 35701 (300 mm long)	1	EA		0
207	P/F Toilet Roll Holder	Providing & fixing toilet paper roll holder Jaquar make Kubix prime series (AKP 35753PS) or Continental series (ACN - 1153N)	1	EA		0
208	P/F Soap Dispenser	Providing & fixing Soap dispenser Shresmo make SHD - 12618	1	EA		0
209	P/F Tissue Paper Dispenser	Providing & fixing Tissue paper dispenser Euronics make EP23 or Opera make	1	EA		0

210	P/F Eye Washer System	SAFETY Eye Washer SHOWER - 6250 GI Udyogi Safety Shower & eyewash operates independently by pull rod, H& push lever & foot lever Shower: Extra-large drench shower head made of highly visible yellow ABS plastics Pipe: ISI marked GI pipe with powder coating for anti-corrosion Valve: SS stay open ball valve with yellow ABS push plate Bowl: Receptor bowl made of ABS & highly resistant to acid, Alkali & oil among others. Atomiser heads: Twin soft flow atomiser head which has aerators to control	0.5	EA		0
211	Prov., Laying & Fix, UPVC 12mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 12 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
212	Prov.,Laying&Fix,UPVC 19mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme dia 19mm	1	M		0
213	Prov.,Laying&Fix, UPVC 25mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 25 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
214	Prov.,Laying&Fix, UPVC 32mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 32 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
215	Prov.,Laying&Fix, UPVC 38mm	Providing, laying and fixing of pipe, material: unplasticized poly vinyl chloride (UPVC), dia: 40 mm, rate shall be inclusive of cost of manpower, material, tools and tackles, bend, tee, make: astral/prince/supreme	1	M		0
216	Prov.,Laying&Fix, UPVC 50mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends - 50 mm	1	M		0
217	Prov.& Replcng CPVC 12mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:12 mm	1	M		0
218	Prov.& Replcng CPVC 19mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:19 mm	1	M		0
219	Prov.& Replcng CPVC 25mm	Providing & fixing finolex / astral / prince / supreme make schedule 40 CPVC pipe along with necessary bends, 't', joints with copper threaded ends:25 mm	1	M		0
220	P/F Pipe, C Class, GI 12mm	Providing & fixing RST / Hindustan make c class GI pipe of 12 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
221	P/F Pipe, C Class, GI 19mm	Providing & fixing RST / Hindustan make c class GI pipe of 19 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
222	P/F Pipe, C Class, GI 25mm	Providing & fixing RST / Hindustan make c class GI pipe of 25 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
223	P/F Pipe, C Class, GI 32mm	Providing & fixing RST / Hindustan make c class GI pipe of 32 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
224	P/F Pipe, C Class, GI 38mm	Providing & fixing RST / Hindustan make c class GI pipe of 38 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
225	P/F Pipe, C Class, GI 50mm	Providing & fixing RST / Hindustan make c class GI pipe of 50 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0
226	P/F Pipe, C Class, GI 65mm	Providing & fixing RST / Hindustan make c class GI pipe of 65 mm, rate shall be inclusive of threading, coupling, tees, bends, clamping, laying at line & level	1	M		0

227	P/F SWR 75mm PVC Pipe Type A	Providing & fixing SWR 75 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
228	P/F SWR 90mm PVC Pipe Type A	Providing & fixing SWR 90 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
229	P/F SWR 110mm PVC Pipe Type A	Providing & fixing SWR 110 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
230	P/F SWR 160mm PVC Pipe Type A	Providing & fixing SWR 160 mm dia PVC pipe type a with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
231	P/F SWR 75mm PVC Pipe Type B	Providing & fixing SWR 75 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
232	P/F SWR 90mm PVC Pipe Type B	Providing & fixing SWR 90 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
233	P/F SWR 110mm PVC Pipe Type B	Providing & fixing SWR 110 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
234	P/F SWR 160mm PVC Pipe Type B	Providing & fixing SWR 160 mm dia PVC pipe type b with selfit ring at all height (including scaffolding up to 6m), rate shall be inclusive of man, material, tools, u clamp, wastage, cutting, bend & tees wherever required, adhesive solution	1	M		0
235	Prov./Laying Salt Glazed Pipe 100mm	Providing & laying salt glazed pipe of 100 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	1	M		0
236	Prov./Laying Salt Glazed Pipe 150mm	Providing & laying salt glazed pipe of 150 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	1	M		0
237	Prov./Laying Salt Glazed Pipe 200mm	Providing & laying salt glazed pipe of 200 mm nominal dia laid to line & required slope or level, rate shall be inclusive of man, material, transportation, mortar filling at joints so as to make it leak proof & 2 inch PCC m10 bedding on base	1	M		0
238	Prov.&Laying Hume Pipe,150mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 150 mm dia.	1	M		0
239	Prov.&Laying Hume Pipe,200mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 200 mm dia.	1	M		0

240	Prov.&Laying Hume Pipe,300mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 300 mm dia.	1	M		0
241	Prov.&Laying Hume Pipe,450mm	Providing & laying hume pipe confirming to IS 458 (class np2) in line and level in required slope or as directed includingProviding all materials pipes etc., cement jointing the collars with 1:1 cement mortar including 50mm thick and sufficient wide (to cover at least 25 mm beyond the joint), m 10 concrete below joints but excluding excavation for 450 mm dia.	1	M		0
242	Laying of HDPE Pipe Of Any Dia	Providing Services for laying of HDPE pipe of any dia, rate shall be inclusive of man, shifting of material from local Tata Power stores to the site, cutting, laying and disposing wastage at Tata Power scrap yard, rate will be exclusive of necessary excavation or allied work	1	M		0
243	Prov.,Cutting&Fix,Pipe ,HDPE,140mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 140 mm	1	M		0
244	Prov.,Cutting&Fix,Pipe ,HDPE,200mm	Providing, cutting and fixing of pipe, material: high density polyethylene, diameter: 200 mm	1	M		0
245	P/F,Gate valve,12mm ISI Marked	Providing and fixing of gate valve, diameter: 12 mm, ISI make or make: ganga	1	EA		0
246	P/F,Gate valve,19mm ISI Marked	Providing and fixing of gate valve, diameter: 19 mm, ISI make or make: ganga	1	EA		0
247	P/F,Gate valve,25mm ISI Marked	Providing and fixing of gate valve, diameter: 25 mm, ISI make or make: ganga	1	EA		0
248	P/F,Gate valve,39mm ISI Marked	Providing and fixing of gate valve, diameter: 39 mm, ISI make or make: ganga	1	EA		0
249	P/F,Gate valve,50mm ISI Marked	Providing and fixing of gate valve, diameter: 50 mm, ISI make or make: ganga	1	EA		0
250	P/F Water meter 3 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 3 inch dia pipe	0.3	EA		0
251	P/F Water meter 4 inch	Providing & fixing water meter of ARAD or equivalent make ISI marked for 4 inch dia pipe	0.1	EA		0
252	P/F Foot Valve - 1 Inch	Providing & fixing Fixing brass foot valve of 1 inch foot valve along with necessary accessories	1.5	EA		0
253	P/F Foot Valve -1.5 Inch	Providing & fixing Fixing brass foot valve of 1.5 inch foot valve along with necessary accessories	1.5	EA		0
254	P/F Foot Valve - 2 Inch	Providing & fixing Fixing brass foot valve of 2 inch foot valve along with necessary accessories	1.5	EA		0
255	P/F Foot Valve - 2.5 Inch	Providing & fixing Fixing brass foot valve of 2.5 inch foot valve along with necessary accessories	1.5	EA		0
256	P/F Foot Valve - 3 Inch	Providing & fixing Fixing brass foot valve of 3 inch foot valve along with necessary accessories	1.5	EA		0
257	P/F Pressmatic Tap	Providing & fixing Jaquar make PRS - CHR - 031 pressmatic tap	1.5	EA		0
258	P/F brass Rod Ball Cock,12mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 12 mm, first quality and of ISI approved make	1	EA		0
259	P/F brass Rod Ball Cock,19mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 19 mm, first quality and of ISI approved make	1	EA		0
260	P/F brass Rod Ball Cock,25mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 25 mm, first quality and of ISI approved make	1	EA		0
261	P/F brass Rod Ball Cock,50mm	Providing and fixing of brass connecting rod with ball cock, material: poly vinyl chloride, diameter: 50 mm, first quality and of ISI approved make	1	EA		0
262	P/F 500 Ltr PVC Tank	Providing & connecting 500 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by EIC	0.4	EA		0
263	P/F 1000 L PVC Tank	Providing & connecting 1000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by	0.4	EA		0
264	P/F 2000 L PVC Tank	Providing & connecting 2000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by	0.4	EA		0
265	P/F 5000 L PVC Tank	Providing & connecting 5000 litre PVC tank Sintex make ACE Antibacterial or equivalent as approved by	0.8	EA		0
266	Providing Plumbing Services	Providing Services for misc plumbing works, rate shall be inclusive of manpower of 1 plumber & helper	1.5	EA		0

267	Prov. Plumbing Material for repairs	Providing Necessary material for plumbing work as approved by EIC, Payment will be made against submitted original invoice / challan of material, including 15% vendor's profit	1.5	EA		0
268	Replacement of Sensor Tap-Washbasin	Providing & fixing sensor tap Hindware make F240001CP or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, removal of existing tap and installation of new tap	1.5	EA		0
269	Replacement of Sensor Batteries	Removing and replacing of sensor batteries, plumbing services including all required tools, tackles, materials, and fixtures, including loading, unloading and transportation up to site for laying etc. complete as directed for following items	1.5	EA		0
270	P/F FRP Grating - 38 X 38 X 38	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (7 - 5 mm), height 38 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	1	M2		0
271	P/F FRP Grating - 38 X 38 X 25	P/F FRP molded grating of mesh size 38 X 38 mm with rib thickness (6 - 5 mm), height 25 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	1	M2		0
272	P/F FRP Grating - 50 X 50 X 12	P/F FRP molded grating of mesh size 50 X 50 mm with rib thickness (8 - 5 mm), height 12 mm, cut to the size and fixed using M-clamp / single clamp / double clamp, rate shall be inclusive of man, material, transportation, cutting to the size, wastage and disposal of debris outside Tata Power	1	M2		0
273	P/F FRP pultruded grating 50 mm thk	Supplying and installation of FRP cover grating code CT40-200 with frame of 50x50x5mm angle and 3mm top chequered plate load bearing capacity of 2200kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin.	1	M2		0
274	P/F FRP pultruded grating 75 mm thk	Supplying and installation of FRP cover grating 75 mm thick light weight code ct25-200 (25 mm thick grating) plus frame of 50x50x5mm box pipe, and 3mm top chequered plate load bearing capacity of 400kg/m2 (made out of i beams of 50mmx15mmx4.5mm thick at c/c 40 mm with notch bar and key way at c/c 200mm). Material to be used will be as per IS 6746 UV stabilized isophthalic resin. Colour # yellow.	1	M2		0
275	P/F FRP manhole cover (900 mm dia)	Prov. & fixing 900 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	0.5	EA		0
276	P/F FRP manhole cover (750 mm dia)	Prov. & fixing 750 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	0.5	EA		0
277	P/F FRP manhole cover (600 mm dia)	Prov. & fixing 600 mm dia FRP medium duty manhole cover along with frame suitable for 2.5 ton load	0.5	EA		0
278	P/F FRP manhole cover (300 X 300)	Prov. & fixing 300 X 300 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
279	P/F FRP manhole cover (450 X 450)	Prov. & fixing 450 X 450 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
280	P/F FRP manhole cover (450 X 600)	Prov. & fixing 450 X 600 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
281	P/F FRP manhole cover (450 X 900)	Prov. & fixing 450 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
282	P/F FRP manhole cover (600 X 900)	Prov. & fixing 600 X 900 mm FRP medium duty manhole cover along with frame suitable for 2.5 ton	0.5	EA		0
283	FRP storm water drain cover 300X300	Prov. & fixing 300 X 300 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
284	FRP storm water drain cover 450X450	Prov. & fixing 450 X 450 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
285	FRP storm water drain cover 450X600	Prov. & fixing 450 X 600 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
286	FRP storm water drain cover 450X900	Prov. & fixing 450 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0
287	FRP storm water drain cover 600X900	Prov. & fixing 600 X 900 mm FRP light duty storm water drain cover along with frame suitable for 2.5	0.5	EA		0

288	P/F FRP fencing	Supplying & Installation of FRP Fencing to sub station of height 2.4 M, with FRP Vertical pipe 50x50x5mm, & FRP Angle of 50x50x5mm, & FRP Grill of square 38mmx38x10mm, thickness 6 mm. The grill are fitted in the Angle frame, which will be fixed on Vertical pole with Foot pad 150x150x130mm, using Anchor Fastener of 16 mm HILTI Made as per given dawing. incl. gate made with same framing, SS Hinge & aldrop. Material to be used will be as per IS 6746 ISOPTHALIC	0.5	M		0
289	P/L FRP septic tank	P/I FRP septic tank, rate shall be inclusive of man, material, tools, transport, installation to the line & level and connecting it with sewage system	0.5	L		0
290	P/F FRP railing	Supplying, fabricating and erecting of approved shade FRP Pultruded handrail square pipe having size 50X50X6.35 mm thick consisting of double FRP rail with top rail & mid rail at 1000 mm & 500 mm respectively & Vertical pipe post of square pipe having size 50X50X6.35 mm thick erected at not more than 1500 mm c/c distance including its own connecting foot pad of size 150 x150 x130 mm fitted with SS 304 M12 -100 LG anchor bolt at bottom with all neceessary accessories and 100 X3 mm toe guard	1	M		0
291	P/F FRP perforated cable trays	Prov. FRP make perforated cable trays of size 450 mm including support	1	M		0
292	P/F FRP chajja	Prov. & fixing 3 mm thick FRP Chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site including scaffolding (up to 12 meter)	0.5	M2		0
293	P/F FRP chajja - excl. scaffolding	Prov. & fixing 3 mm thick FRP chajja, plain at top side in required color & design, rate shall be inclusive of man, material, transportation, bracket of MS flat 20 * 5 mm @ maximum 1m c/c, fixing at site, excluding scaffolding and manlifter	1.5	M2		0
294	P/F CMRCL flush door shtr,38mm	Providing Services & material for 38 mm thick commercial flush board shutter with 1 mm thick laminate of Century / Greenlam / Kitply of required shade, 6 mm thick 2 year seasoned teakwood lipping, making any cutout for glass including fixing of glass with beading, 3 nos. 4 inches railway type hinges, 110 mm CP handle, CP aldrop, door stopper on each shutter, sneak hole with glass, painting of lipping by 2 coats of approved enamel paint.	1	M2		0
295	P/F kitchen under counter shutter	Providing Material & fixing under counter kitchen cabinet with frame & shutter, rate shall be inclusive of 1 inch thick frame, 18 mm Greenply made plywood shutter with 1 mm century laminate Natural Oak 3397 & white sun mica internal side, 6 mm lipping of all four side, chrome plated handle, magnet lock, SS hinges, two coat paint of synthetic enamel paint of approved shade on frame	1	M2		0
296	P/F fire rated door with panic bar	Providing , fixing, loading unloading , single Leaf 2 hrs fire resistant door with 44 mm shutter thickness, in fill honey comb core, doors shutter made of GI sheet of 0.9 mm thick and frame made of GI sheet of 1.3 mm thick with single rebate frame of 100 * 75 mm . Powder coated frame & shuter with 50-60 micron, including 6 mm thick fore rated galss panel for clear vision 200 * 300 mm, SS 304 fire rated ball bearing hinges , with panic bar single point, external trim,	0.5	M2		0
297	P/F Al anodised,window,2 track	Providing, erecting and fixing of aluminum anodized sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class B section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per IS code or as directed	1.5	M2		0

298	P/F Al anodised,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as	1.5	M2		0
299	P/F Al anodised,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	1.5	M2		0
300	P/F Al powder coated,window,2 track	Providing, erecting and fixing of aluminum powder coated sliding window, 2 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 75 x 25 x 14 mm, shutter must be made of Jindal make class b section of 18 mm and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	1.5	M2		0
301	P/F Al powder coated,window,3 track	Providing, erecting and fixing of aluminum anodized sliding window, 3 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of 100 mm x 25 mm x 14 gauge, shutter frame must be Jindal make class b section of 18 mm, 14 gauge and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is	1.5	M2		0
302	P/F Al powder coated,window,4 track	Providing, erecting and fixing of aluminum anodized sliding window, 4 track, confirming to standard: IS:1868, main frame shall be made out of hollow extruded section of size: 125 x 25 x 14 mm, shutter frame must be Jindal make b class 18 mm section, 14 gauges and panelled with approved thickness: 5.5 mm or opaque glass, all aluminum section will be finished with anti corrosive rust proof coating of approved quality and shade all as per is code or as directed	1.5	M2		0
303	P/F domal section windows (2 track)	Providing & fixing 2 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or equivalent	1.5	M2		0
304	P/F domal section windows (3 track)	Providing & fixing 3 track 16 gauge domal section windows of size of 25 X 75 mm sections, including 6 mm clear float glass of modiguard / saint gobain or equivalent	1.5	M2		0
305	P/F UPVC windows	Providing & fixing factory made white UN-Plasticized poly Vinyl chloride (UPVC) windows(FENESTA or Equivalent as approved by site in charge) at all levels made out ofextruded three chambered profile frame with hermetically sealed double glazed glass customized in 56mm wide system ,all fittings and fixing at site andsealing the gaps etc. as per the designed and as directed by site in charge.	1.5	M2		0
306	P/F Al powder coated fixed windows	Providing & fixing Al powder coated fixed window using 63 X 38 X 14 gauge powder coated Al section with powder coating min. 50 micron on exposed surface, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	1	M2		0
307	P/F Al anodized fixed windows	Providing & fixing Al anodized window using 63 X 38 X 14 gauge powder coated Al section with buffing of all sections, including glazing clippings, annealed glass of 5 mm thickness and PVC clear beading	1	M2		0
308	P/F Anodized Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal make anodized and buffed as per required shade, with Z section for installation of 100 mm wide blur / frosted annealed glass	1	M2		0

309	P/F powder coated Al louver	Providing & fixing AL louver on 16 gauge 40 X 15 mm rectangle section of Jindal , with Z section for installation of 100 mm wide blur / frosted annealed	1	M2		0
310	P/F Anodized Al partition	Providing & fixing Al anodized partition made of 63 X 38 mm 14 gauge Jindal make sections, with buffing of all surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	1	M2		0
311	P/F Al powder coated partition	Providing & fixing Al powder coated partition made of 63 X 38 mm 14 gauge Jindal make sections, with min 50 micron powder coating at exposed surfaces and installaion of 9 mm thick backelite sheet & 5 mm thick annealed (plain) glass wit clips, installed to line & level and as per required dimension	1	M2		0
312	P/F Aluminum anodized door	Providing & fixing partly glazed partly panelled Al anodizing door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top	1	M2		0
313	P/F Aluminum powder coated door	Providing & fixing partly glazed partly panelled Al powder coated door made of 14 gauge X Jindal make section with buffing of section, (1) Handle section - 85 X 45; (2) Hinge side section 48 X 45; (3) middle section 85 X 45; (4) Top - 85 X 45; (5) Bottom 115 X 45, including lock, both side handles and hinges, tie rod at the top and bottom sections with 9 mm thick particle board at bottom and 5 mm clear annealed glass at top, minimum 50 micron powder coating	1	M2		0
314	P/F Aluminum framed backelite door	Providing & fixing backelite door made of 16 gauge X 25 X 65 mm Al powder coated frame with 3 mm thick backelite sheet along with 4 inch tower bolt, 3 nos. hinges, installation	1	M2		0
315	P/F Al grill (2 x 2 inch)	Providing & fixing Al Grill - mesh opening 50 mm X 50 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	1	M2		0
316	P/F AL grill (3 x 3 inch)	Providing & fixing Al Grill - mesh opening 75 mm X 75 mm in 5 mm thickness with framing of 16 gauge 40 X 15 aluminium pipe, Rate shall be inclusive of man, material, transportation, installation & wastage	1	M2		0
317	P/F Door closer	Providing & fixing HYPER / GODREJ (9420) / ENOX / DORMA (TS 71) MAKE DOOR CLOSER	1	EA		0
318	P/F concealed door closer	Providing & fixing concealed door closer Godrej / Dorma / Enox make as per approved AOC palatte	1	EA		0
319	P/F door floor spring	Providing & fixing Floor spring including making cut out in floor and fixing of spring, rate shall be inclusive of man, material, installation so as to complete the job. (Product - Dorma make BTS 75V / Godrej make	1	EA		0
320	P/F PVC beading of windows	Providing & replacing beading of sliding windows with PVC beading, rate shall be inclusive of man, material, opening of window shutter and replacing beading, refixing	1	M		0
321	P/replacing friction stay hinges	Providing & replacing SS 430 / SS 201 friction stay hinge of openable window of 10 inch for max width 1200 mm, , rate shall be inclusive of manpower, material, removal of window, replacement of hinge and reinstallation of window	1	EA		0
322	P/F cp tower bolt 6	Providing & fixing 6 inch CP tower bolt	1	EA		0
323	P/F CP tower bolt 8	Providing & fixing 8 inch CP tower bolt	1	EA		0
324	P/F aldrop	Providing & fixing 12 inch CP aldrop	1	EA		0
325	Prov. & replacing SS wire mesh 24G	Providing & replacing ss mosquito mesh of existing sliding windows shutters at all heights including removing damaged mesh, providing new ss mosquito mesh 24 gauge 16 mesh and fixing it in window as earlier of matching shape and design with nails / screw complete with finishing as directed by TPC	1	M2		0
326	P/F cylindrical lock	Providing & fixing cylindrical lock Godrej / Enox / Hafele / equivalent make as per AOC palette	1	EA		0
327	P/F mortise lock (office door)	Providing and fixing brass mortise latch & lock 100mm X 65mm with 6 levers & a pair of brass lever handle(for main door).	1	EA		0

328	P/F 12 mm thk toughened glass door	Providing & fixing 12 mm thick toughened glass door cut to the required size with Godrej make Patch fittings for top, bottom pivot and side patches, rate shall be inclusive of man, material, transportation and installation at site	0.5	M2		0
329	P/F toughen glass door lock - door	Providing & fixing toughen glass door lock (Godrej make - prod code 7780)	0.5	EA		0
330	P/F toughen glass door lock - floor	Providing & fixing Bottom lock in glass door Godrej make Bottom lock patch 7759 or Godrej make Side lock patch 7764.	0.5	EA		0
331	P/F door stopper	Providing & fixing chrome plated door stopper	1	EA		0
332	P/F door buffer	Providing & fixing 100 mm long door buffer made of	1	EA		0
333	P/A of sun film	Providing & applying Garvare make sun control film of required shade, Garware make high heat rejection film HHR 25	2.5	M2		0
334	P/F white board film	Providing & fixing Garware make White Board film of PTE film thickness 150 micron	1	M2		0
335	P/F partition cubicle for washroom	Providing & fixing Modular cubical in 12mm compact laminate of approved color and texture with ss hardware comprising of door shutter, wall fixing rose, head, rail, wall bracket, tubular holder, corner connector, coat hook cum door stopper, lock cum occupancy indicator, hinge, door knob, adjustable foot and all other necessary accessories required to complete the job in all respect. Make - matrix,	1	EA		0
336	P/F urinal partition	Providing & fixing urinal partition: providing and fixing of urinal composite partition of approved colour and make including all tools and tackles fixing at site in line and level etc complete as directed.	1.5	EA		0
337	P/F mirror - 600 x 450	Providing & fixing mirror of size 600 X 450 along with bracket / studs	0.5	EA		0
338	P/F mirror - circular	Providing & fixing Mirror of 550 mm dia along with brakcet / studs	0.5	EA		0
339	P/F toughen glass 12 mm	Providing & fixing 12 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gauge Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	1	M2		0
340	P/F toughen glass 8 mm	Providing & fixing 8 mm thick toughen glass of Saint gobain / modiguard or equivalent, rate shall be inclusive of installation of 14 gague Aluminium channel at top & botton or / making groove in floor & masonry, finishing joint of glass with silicon sealant	1	M2		0
341	P/F H handle for glass door(450 mm)	Providing & fixing of Godrej make H tyep HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (length -	1	EA		0
342	P/F H handle for glass door(600 mm)	Providing & fixing of Godrej make H type HANDLE, TYPE: SS H, INCLUDING ALL TOOLS & TACKLES (lentgh	1	EA		0
343	P/F cabin door handle	Providing & fixing of Godrej make NEH 03 handles	1	EA		0
344	Silicon sealant - stone to al	Providing & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to granite / marble stone	1	M		0
345	Silicon sealant - masonry to al	Poviding & applying silicone sealant of Dow / Dr. Fixit silicon sealant suitable for Aluminium to cement plaster surface	1	M		0
346	Silicon sealant - glass to glass	Providing & applying clear silicone sealant of Dow / Dr. Fixit silicon sealant suitable for glass	1	M		0
347	P/F gypsum board false ceiling	Providing & fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing and fixing of framework as spelled out in approved manufacturer catalogue. Bidder to provide adequate steel sections & hanger supports, including making openings for ac grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick.Vertical / inclined face shall be measured above 200 mm high only.	5	M2		0

348	P/F tegular grid ceiling	providing & fixing tegular grid ceiling system, at all heights including providing and fixing of framework in silhouette system sections as spelled out in Armstrong or equivalent manufacturer catalogue. Ceiling tiles shall be of size 600 mm x 600 mm of approved color. Incl. adequate steel sections (channel, main runner, cross runner in silhouette section) and hanger / GI wire supports to cater to the false ceiling loads. Approved make: Armstrong or equivalent	5	M2		0
349	P/F gypsum board false ceiling-Band	Providing all materials and fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing & fixing of framework as spelled out in Saint Gobain or equivalent. Incl. adequate steel sections (channels, L or T sections) and hanger supports to cater to the ceiling loads. Incl. making openings for AC grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick. (For width below 200 mm)	10	M		0
350	P/F gypsum board	Providing all materials and fixing monolithic gypsum board conforming to IS 2095, at all heights on existing supports. Vertical / inclined face shall be measured above 200 mm high only. For payment purpose false ceiling shall be measured in plan only.	4.5	M2		0
351	P/F 3 mm thick backelite sheet	Providing all materials and fixing 3 mm thick backelite sheet, at all heights on existing supports. For payment purpose false ceiling shall be measured in plan only.	4.5	M2		0
352	P/F PVC false ceiling	Providing & fixing PVC ceiling planks 7 to 10 mm thick, including providing and fixing of framework as spelled out in manufacturer catalogue. Quote shall include sealing off the ends, capping, all support systems, edges framing etc.	4.5	M2		0
353	P/F false ceiling - open cell # WR	Providing & fixing of open cell cellio metal false ceiling system at all heights including providing and fixing of framework as spelled out in Armstrong or equivalent, size 600 mm x 600 mm. including providing adequate steel sections (channels, i or t sections) and hanger supports to cater to the false ceiling loads. Owner would check the design and adequacy and has the right to reject if found inadequate. Job to be complete in all respect.	1.5	M2		0
354	P/F perforated false ceiling	Prov & fixing of Infratop false ceiling with hidden/visible perforations, of panel sizes of 340mmx 2700mm, resistant to moisture, borer-fungus-termite attack. Panels to be installed with GI / Aluminum sections of suitable gauge & size according to site conditions. Panels SV 08/07 &09 with suitable trims SV 15 with dimensions 40x19x22x12x3050 mm for edge profiles & SV 18 with dimensions 67x3050 mm with T head of 42mm for connecting profiles. 10 years warranty for colour & finish of the panels	2.5	M2		0
355	Fixing existing false ceiling	Providing Services for fixing of available false ceiling panel by laying new mesh of silhouette section supports, rate shall be inclusive of man, material, tools & tackles, transportation	2.5	M2		0
356	P/F Antistatic false flooring-300mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-	2.5	M2		0
357	P/F Antistatic false flooring-450mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-	2.5	M2		0
358	P/F Antistatic false flooring-600mm	Providing and fixing anti static false flooring with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head-	2.5	M2		0

359	Installing existing false flooring	Providing Services for installation of existing false flooring panels, rate shall be inclusive of manpower, flooring support of 450 mm, laying & fixing supports to the line and level, cutting of flooring panels as per site requirement and installation	2.5	M2		0
360	P/F ACP cladding	Supplying and fixing aluminum composite panel of approved make and colour for exterior application. The 4 mm thick panels of 3mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with self-adhesive peel off masking foil with PVDF base coating on top side and rear side would be in mill finish. As per the specification duly fabricated on imported holzer machines and fixed to extruded aluminum sections	2.5	M2		0
361	P/ F ACP cladding (firewall a2)	Providing & fixing Aludecor make firewall a2 ACP sheets or equivalent as approved by EIC, rate shall be inclusive of man, material, transportation, al support structure using 25 x 25 mm square pipe, cutting of sheet, wastage and disposing of debris outside tata	1.5	M2		0
362	P/F ACP cladding (excl. support)	Providing & fixing ACP sheet of approved make & colour for exterior application. The 4 mm thick panels of 3 mm thick thermoplastic core of mid low density polyethylene sandwiched between two skins of minimum 0.5mm thickness aluminum sheets, protected with PVDF base coating on top side & rear side would be in mill finish. fixed to existing support	5	M2		0
363	Removing of blinds	Providing Services for removal of vertical / roller blinds and disposal it scrap yard or designated place as instructed by EIC	5	M2		0
364	Fixing of available blinds	Providing Services for fixing of existing available roller blind / vertical blinds, rate shall be inclusive of manpower, necessary screws or minor fixtures to complete the job	1.5	M2		0
365	P/F vertical blinds	Providing and fixing of vertical blind for window. Providing Aluminum channel with 100mm fabric size with operating unit .etc providing all equipment, material, tools, tackles etc for fixing blinds of approved make and shade etc complete as directed by site in charge	1.5	M2		0
366	Serv. for repair of vertical blinds	Providing services for repairing chain / holder etc for vertical blind.	1.5	M2		0
367	P/F roller blind	Providing and fixing of roller blind for window, providing, translucent fabric, with Aluminum frame and control unit along with the material, tools, tackles etc for fixing blinds for windows of approved make and shade by tata power etc complete as directed (product - platina make 01a bamboo or 01a alfa)	1.5	M2		0
368	Prov services of carpenter (1+1)	Providing carpentry services for one shift, rate shall be inclusive of one carpenter & one helper	1.5	EA		0
369	Prov Material for carpentry repairs	Providing Material for minor carpentry works, payment will be made against submitted bills and challans of material, incl. 15% profit for vendor	1.5	EA		0
370	Chair repair - handle (godrej)	Providing & replacing handle of chair for Godrej make leoma	0.5	EA		0
371	Chair repair - handle (stellar)	Providing & replacing handle of chair for stellar make Rev CH 16	0.5	EA		0
372	Chair repairs - wheel	Providing & replacing wheel of chair of Godrej / stellar make chairs	0.5	EA		0
373	Repl. Hyd. Cylinder chair (godrej)	Providing & replacing hydraulic cylinder of chair (for Godrej make leoma) along with handle	0.5	EA		0
374	Repl. Hyd. Cylinder chair (stellar)	Providing & replacing hydraulic cylinder of chair (for stellar make Rev CH 16) along with handle	0.5	EA		0
375	Prov. & replacing laminate 1 mm	Providing & replacing laminate of wooden door or shelf, rate shall be inclusive of removal of existing laminate by heating, grinding the surface to the smoothest possible, applying adhesive and pressing 1 mm thick laminate of approved shade and make over cleaned surface, rate shall be inclusive of man, material, transportation, wastage and disposal of debris, removing & refixing of door	0.5	M2		0

376	Removal and refixing of door	Removing and refixing of wooden door (size height: 80-inches (6-feet, 8-inches) thickness: 1 ¾-inches. Width: 36-inches, providing all tools tackles material for removing and refixing the wooden door completed as	0.5	M2		0
377	Marking & Painting of Strips 100mm	Marking and painting of strip, width: 100 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two	2.5	M		0
378	Marking & Painting of Strips 75 Mm	Marking and painting of strip, width: 75 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect	2.5	M		0
379	Marking & Painting of Strips 50 Mm	Marking and painting of strip, width: 50 mm, providing all required material road marking synthetic enamel, brushes, solvent, tools and tackles, skilled painter for cleaning and preparing the surface by scrapping sand papering to remove loose scale, making the surface plain and marking the strip, painting two coats in perfect strip and painting two coats in perfect	2.5	M		0
380	Providing & Carrying Out White Wash	Providing & carrying out Whitewash by cleaning the surface by using brush, making it free from any loose or foreign material, dirt, oil, grease etc., preparing white wash water with mixing 1kg class D lime with 6 litres of water, leaving it for 2 days for uniform thin cream, mixing glue 100 gm per 6l of whitewash water, then applying it in two coats to achieve uniformity in white wash.	2.5	M2		0
381	P/A 2 Coats of Lime Geeru Upto 3 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and	1.5	EA		0
382	P/A 2 Coats of Lime Geeru 3 to 6 Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth 3 feet to 6 feet.	1.5	EA		0
383	P/A 2 Coats of Lime Geeru above 6Ft	Providing & applying two coats of lime and Geeru to combine height of 1.20 m to the trunks of trees of girth upto 3 feets with correct line and level and width as required. Rate will be inclusive of cleaning tree trunk, making it dust free for application of Geeru and lime. But for girth above 6 feet.	1.5	EA		0
384	P/A Synthetic Enamel Paint	Providing and applying two coats of synthetic enamel paint of approved make over one coat of primer on structural steel including scaffolding at all height, providing all material for process	1.5	M2		0
385	P/A Acrylic Emulsion Interior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including filling up the crevices, cracks & holes with approved quality of painter#s putty and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (internal quality) of first quality and of approved manufacturers and approved shades.	7.5	M2		0
386	P/A Duco Paint	Prov. & applying duco paint as per following process:- 1) Filling dents and uneveness using wood filler putty and sanding it 180 no. sand paper 2) Applying 1st coat of primer with thinner (1 thinner : 1.5 primer) 3) sanding the surface again and fill the dents using wood filler putty 4) Apply one coat of primer on repaired surface and sand the surface with 220 & 320 no. sand paper 5) Apply 2 coat of duco paint (Duco NC lacquer 1 part: Duco thinner 2 part).	2.5	M2		0

387	P/A Acrylic Emulsion-1 coat interna	Supplying providing and applying to wall with water base acrylic emulsion paint of approved manufacture and of approved colour and shade including scaffolding etc complete as directed by EIC and application as per manufacturer's recommendation, including scaffolding ,cleaning surface etc. Acrylic	7.5	M2		0
388	P/A Acrylic Emulsion Exterior	Providing and applying emulsion primer along with anti fungus treatment as per requirement including opening up of crevices, cracks & holes and making v grooves, and filling up with approved quality of crack filler and making the surfaces smooth and finishing with two coats of approved quality paint at all heights with acrylic emulsion paint (external quality) of first quality and of approved manufacturers and approved	5	M2		0
389	P/A Leafy Aluminum Paint	Providing all necessary tools ,tackles ,preparing the surface by scraping, chipping to remove loose rust, paint, detrimental foreign matter etc. Providing and applying one coat of high build zinc phosphate primer 35 microns DFT. Applying two finish coats of leafy aluminum paint (IS 2339) of 30 microns DFT of each coat complete as directed by EIC at all heights. total thickness of DFT shall not be less than 95 microns	2.5	M2		0
390	P/A Birla White Putty	P/A Birla white putty, Mix Birla white wall care putty with clean water slowly to make paste. Continue the mixing for 10-15 minutes till a uniform paste is formed. Apply the first coat on already moistened wall surface. After drying of first coat of putty just rub the surface gently with west sponge or rub the surface very gently with the putty blade in order to remove the loose particles. Allow the surface to dry for at least 3 hours and then apply second coat.	2.5	M2		0
391	P/A POP Punning	Providing and applying of 4 to 8 mm thick lime pop punning over all types of plastered surfaces of walls ceiling beams columns etc. To bring surface in plumb line and level, including making surface smooth, providing required grooves on top of skirting etc. The cost shall include all labour, materials, scaffolding, protecting adjoining surface, cleaning etc complete.	2.5	M2		0
392	P/A High Build Epoxy Paint	Providing and applying one coat of surface tolerant epoxy primer at 50 microns DFT followed by two finishing coats of high-build coal tar epoxy in recommended DFTs (100 microns DFT per coat) for chequered plates / gratings. Total thickness of DFT shall not be less than 250 microns. Item includes preparing the surface by scraping, sand papering, cleaning, solvent cleaning wherever required to remove oil/grease & painting with two coats of high-build coal tar epoxy in recommended DFT.	2.5	M2		0
393	P/A Varnishing	Preparing the surfaces of wood by removing the existing stains, dirt, etc. By sand papering, filling cracks, depressions etc. with approved quality of putty or wax wherever required and as recommended by TPCL engineer and applying coats of French polish.	2.5	M2		0
394	P/A Melamyne Polish	P/A melamyne Polish (Make asian paint or equivalent approved by Tata Power) on wooden surface including all tools ,tackles ,plant, equipment (i) Scrubbing with sand paper (ii) Applying lac polish/spirit and lak dana solution (iii) filling small holes/cracks/scratches making surface even with putty/whiting mix with desired raw/burnt/burnt turkey amber sienna and lac polish (iv) Apply sand paper again on applied putty/whiting for finishing surface (v) Apply 2 coats of polish with buffing	2.5	M2		0
395	P/A PU Polish	Providing all necessary tools tackles services etc. For removing & providing high quality PU polish on door as directed by site engineer. Shade and color of the polish shall be same as previous shade & color.	2.5	M2		0
396	P/A Luminous Paint	Prov. & applying luminous paint of required shade, rate shall be inclusive of scrapping of surface to make it free from dirt, oil and algae, applying one coat of water based primer and two coats of luminous paint	2.5	M2		0

397	Services for Wild Growth Cutting	Providing Services for removal of grass / shrubs (of size up to 3 feet height) by uprooting them or cutting them from base, rate shall be inclusive of man, tools, disposal of wild growth outside tata power premises	12.5	M2		0
398	Services for Weedicide Spraying	Providing & spraying weedicide at switchyards in power house, rate shall be inclusive of material, spraying tools, manpower so as to complete the job. Vendor should submit MSDS of weedicide prior to use	12.5	M2		0
399	Service for Cleaning of Moss	Providing Services for moss removal by spraying bleaching powder over the area, leaving it for 30 minutes and spray water over it	12.5	M2		0
400	Service for Housekeeping	Providing Services for material shifting & cleaning of operational areas as instructed by EIC	20	M2		0
401	Prov.& Supply Red	Supplying natural red soil at site as directed by EIC	1	M3		0
402	Prov. & supply manure	Providing & supplying good cow dung manure, loading & unloading at site etc.	1.5	M3		0
403	Serv. clearing Sewage Line Chockup	Providing Services for completing / attempting choke up clearance in any sewage line by using traditional method of using 8 mm / 10 mm reinforcement bar, pouring in water with pressure as much as possible as instructed by EIC	2.5	M		0
404	Cleaning Septic Tank by suctiontank	Providing Services of municipal corporation suction tank & ite operating team	0.6	EA		0
405	Serv for Cleaning of Sewage Chamber	Providing Services for cleaning of sewage chamber of all sizes by removing its muck and disposing it away from residential area outside tata power premises	1.5	EA		0
406	Serv for Gravel & Boulders Removal	Providing Services for removal of gravel & boulders filled in transformer foundation or in switch yard ground and shifting within 100 meter lead inside tata power premises	1.5	M3		0
407	Serv for Laying available Gravel	Providing Services & material for laying gravels (50 - 60 mm) in transformer foundation with gravels & boulders (200 - 250 mm) available at site as instructed	1.5	M3		0
408	Prov. & Laying Gravel in Switchyard	Prov services & material gravel in switch yard of size 50 - 60 mm in layer maximum upto 300 mm depth, rate shall be inclusive of shifting material within 200 meter lead, levelling of surface	1.5	M3		0
409	Prov & Laying Sand Bags	Providing & laying river / sea sand bags (min weight 20 kg per bag), shifting & laying cable trenches	1.5	EA		0
410	Prov. & filling sand in trenches	Providing Services for river / sea sand filling in trenches and levelling, rate shall be inclusive of man, material, shifting of sand upto 100 m lead.	1.5	M3		0
411	Services for removal of Sand Bags	Providing Services of removal of sand bags and shifting it to designated place as instructed by EIC	1.5	EA		0
412	Services for Laying of Sand Bags	Providing Services for laying of existing sand bags, rate shall be inclusive of shifting of sand bags upto lead of 100 m	1.5	EA		0
413	Const. of earth pit 600 x 600	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 600mm x	1.5	EA		0
414	Const of earth pit 900 x 900	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 900mm x	1.5	EA		0
415	Const of earth pit 1200 x 1200	Providing all tools, material & manpower for constructing of new earth pit incl Providing and laying of fine sand in layer in earthing pit, salt, coal, bentonite in earthing pit in layers & 8mm thickness MS plate above it. Rate shall include the cost of loading, transporting and unloading, shifting of material at the designated place & number painting on earth pit plate with synthetic enamel paint as directed by EIC. Size of earth pit as follows 1200 mm x	1.5	EA		0

416	Supplying Marconite rod 100 mm dia	Supplying 3 m long marconite rod by casting marconite compound around 20 mm dia copper rod, rate shall be inclusive of man, material, tools, transportation and installation at site, rod must be	1.5	EA		0
417	Refurbishment of earth pit 600x600	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 600 mm x 600mm	1.5	EA		0
418	Refurbishment of earthpit 900 x 900	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 900 mm x 900mm	1.5	EA		0
419	Refurbishment of earthpit 1200x1200	Refurbishment of existing earth pit rate shall be including removing of existing earthing rod of any size, sand, coal, bentonite, existing earthing pit cover of mild steel /aluminum chequred plate of any size and thickness. making of new earth pit by prov. & laying of fine sand , salt ,coal ,bentonite in earthing pit in layers & 8 mm thick MS plate above it. incl transport, shifting of material & number painting on earth pit plate with synthetic enamel paint. for 1200 mm x 1200mm	1.5	EA		0
420	Brazing of Copper Conductor 0.2 mm	Providing all material, tools and tackles, service for brazing of 0.2 copper conductor	1.5	NO		0
421	Laying Copper Conductor 0.2mm	laying copper conductor,0.2mm, providing all tools & tackles for laying conductor in line as directed by EIC	1.5	M		0
422	P/A Acrylic waterproofing	Providing & applying Acrylic waterproofing coat over RCC roof including removing of existing waterpoofing treatment, removing damaged or loose portion of roof substrate, preparing surface free of dirt, oil etc., filling unlevelled surfaces with polymer modified mortar prepared by Dr. Fixit URP & filling surface cracks with Dr.Fixit Crack X, grouting of roof with non shrinkable polymeric grout, then applying primer coat of Dr. Fixit primeseal two coats of Dr. Fixit New coat with fibreglass mat	2.5	M2		0
423	Prov Brick bat coba waterproofing	Providing and laying brickbat coba in sunken portion of WCs, bathrooms, etc., consisting of one part of cement, 2 parts of broken brickbats varying from 12 mm to 25 mm thick and one part of lime mortar to two parts of sand as specified including preparing the surface by applying and grouting a slurry coat of neat cement using 2.75 kg/m2 of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the	2.5	M2		0
424	P/A APP / STP membrane	Providing and applying of Shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application followed by providing and applying of shalitex primer (solvent base) followed by 3mm superthermolay laying by hot torch application. Top surface : providing and applying silver shield (bituminous aluminum coating) (With 5 year guarantee).	2.5	M2		0
425	Prov china mosiac waterproofing	Providing and laying intenral cement based water proofing treatment with China Mosaic finish including preparation of surface as required for treatment of roofs, balconies, terraces, RC gutters, etc. as per approved mehtodology	2.5	M2		0

426	P/A PVC membrane	Preparation & curing clean the surface & provide geotextile (minimum 300gsm). Provide PVC membrane (made of virgin PVC)alkor bright (minimum 1.5mm thick) over the surface &start placing from lowest point. Unroll the membrane half way align & fix themembrane 1st layer with the help of anchors & aluminium washers & adjacentlayer with hot air welding & applying unifrom pressure by roller/wet cloth toremove entrap air. Membranes to be fixed with aluminium strips at the end aboveparapet wall.	2.5	M2		0
427	Prov. Covering for windows	Providing, fixing & removing plywood (12mm to 20 mm thickness) covers of existing machine units/pump etc. (actual area of openings covered by plywood be measured.)	2.5	M2		0
428	Removal of loose concrete	Providing services for chipping of loose concrete from beams, columns, slabs & all other concrete surfaces to expose sound concrete beneath using light chisel & hammer & also preparing concrete surface to receive further treatment, disposing the debris as directed	2.5	M2		0
429	Removal of rust	Providing services for cleaning reinforcement of total rust by tapping or using wire brush or any other suitable way including from behind and around the reinforcement bars to give it a totally rust free finished steel surface. Measurement shall be on basis of repair surface area. Providing and applying approved chemical rust remover with paint brush and removing loose particles after 24 hours of its application. Measurement shall be on basis of	2	M2		0
430	corrosion inhibitor	Providing & applying corrosion inhibitor, the exposed reinforcing bars shall be cleaned thoroughly to remove corrosion scales using buffing wheel and emery cloth. The exposed surface shall be washed with water jet followed by applying two coats of anticorrosive chemical of approved brand on cleaned rebars as per manufacturers specification and directions of engineer-in-charge. (surface area of concrete treated will be measured for payment)	2	M2		0
431	Corrosion treatment	Corrosion Treatment :- Removing existing corrosion by means of mechanical wire brush on exposed surfaces of reinforcement, providing and applying Alkaline based Rust Converter RUST GUARD in single coat over the exposed rusted reinforcement as per the manufacturer specifications and instructions. Providing and Applying two coats of Zinc rich Primer on re-inforcement , STEEL GUARD at all heights etc complete.	2	M2		0
432	Treatment for separation cracks	Treatment For Separation Cracks :- Opening up the junction of brick work and beam / column, sealing the junction by metal packing/filling by polymer mortar, then overlaying the joints / crack by approved fibre sheet (strip) approx 200mm wide, applying bond coat of approved polymeric slurry before and after the fibre sheet is fixed over the joint (junction / crack) etc complete.	2	M		0
433	Crack filling	Providing material & treating cracks by filling , Cleaning the crack surface with the help of clean water, drying the surface in natural sun, providing & applying the bonding coat, providing & fixing fiber cloth 25mm to 50 mm width, filling the same with polymer putty, providing & applying 2 coats of acrylic polymer to that width of the surface cure natural for	2	M		0
434	Crack filling using polymer plaster	Carefully opening the cracks in plaster, cleaning the cracks with electrical air blower/water & filling the cracks with polymer modified cementitious mortar in proportion 1:5:15 (i.e. Polymer: cement: well graded quartz sand by wt.) including polymer bonding coat & seal coat, curing etc. complete. (Note: Width of cracks upto 6 mm and depth upto 20mm.)	2	M		0
435	PU sealant	Cleaning & filling the joints/gaps between the window with the help of PU Sealant of approved make etc complete in all respect from the both sides.	2	M		0

436	Epoxy bond coat	Providing and applying bond coat on the prepared surface to receive new polymer mortar/polymer modified concrete, with two components epoxy based bonding coat concresive 1414 of BASF/Nitobond ep of FISROC/ Fitbond EA of Conmix or equivalent material in one full coat. Laying of reinstatement polymer mortar or micro concrete shall be completed within the overlay time of bonding coat. Item rate inclusive of all man, material, transportation, tool etc.	2	M2		0
437	P/A Polymer plaster	Providing and applying of polymer modified mortar single component, alkaline resistant fibre reinforced, duel shrinkage-compensated, thixotropic, cementitious patch repair mortar as suitable material and finishing with trowel carefully compacting the same around the rebar's and finishing to bring it in line with existing concrete surface on the columns, beams & slabs etc., 25 mm thick polymer / latex modified	2	M2		0
438	P/L Micro concrete	Providing and laying of micro concrete, approved brand in proportion 1:1 with metal no.1 including mixing, waterproof shuttering, pouring, consolidating, scaffolding, curing as per MFG specifications, transportation at site, identification of leakage source, including dewatering of pits whenever required till completion of job etc complete as directed. (Measurement will be taken on consumption of micro concrete only, metal/aggregate will not be measured separately.)	2	KG		0
439	P/A prodecoat 0770	Providing and applying Prodecoat 0770 as per following methodology 1. Cleaning entire surface with high pressure water jet pump 2. Allow surface to dry 3. Open visible cracks in 5 mm * 5 mm width & depth. 4. Apply one coat of POLYSEAL-0724 in the opened cracks uniformly. 5. Allow it to dry for 4 Hours. 6. Fill the cracks with polymer sealant AQAUASEAL 7. Apply first coat of PRODECOAT- 0770 uniformly with brush or roller 8. Allow it dry for 60 minutes 9. Apply second coat of PRODECOAT-0770	2	M2		0
440	P/A Elastomeric paint	Providing & applying one coat of primer and two coats of elastomeric paint having an sel elangation upto 200 % applied to the surface at interval of not less than 6 hours to the approved shade and colour etc. complete. RAINGUARD .(,Providing & applying two coats of Elastomeric coating having 200-300% elongation over a coat of primer over properly prepared plaster surface including scrapping all loose material on existing plastered surface etc complete as	2	M2		0
441	FST 250	Providing & applying Expanded Foam (FST-Foam Duct Sealant 250) including Cartridge Set with Mixing Nozzle for any cable entry points gap filling work as directed by TATA power Engineer. The rate shall includes the cost of materials & associated	2	EA		0
442	Providing Service F/Hiring JCB	Hiring of JCB with fuel, operator and carrying out work as directed for 8 hours shift	0.5	SFT		0
443	Providing services of Crane 90 Ton	Providing service of 90 ton crane meeting all the requirement of tata power safety norm, rate should be quoted for 8 hr shift	0.2	SFT		0
444	Prov Services of Compressor Breaker	Prov. Services of compressor / tractor breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours shift	0.5	SFT		0
445	Prov. Services of JCB Breaker	Prov. Services of JCB breaker for breaking of PCC / RCC / rock, rate shall be inclusive of manpower, transportation, fuel charges, mobilization charges, operator charges. Rate will be for 8 working hours	0.5	SFT		0
446	Providing services of Ferrana	Providing service for hiring of Ferrana meeting all the requirement of Tata power safety norm, rate should be quoted for 8 hrs shift	1	SFT		0

447	Service for Hiring Tempo 10kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10	1	SFT		0
448	Service for Hiring Tempo 20kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20	1	SFT		0
449	Service for Hiring Tempo 30kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30	1	SFT		0
450	Services for Hiring Tempo 30-50 Kms	Prov. Services for material shifting of any type of material in Tata magic or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50	1	SFT		0
451	Services for hiring Tata 407 10 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 10 kms)	1	SFT		0
452	Services for hiring Tata 407 20 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 20 kms)	1	SFT		0
453	Services for hiring Tata 407 30 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance up to 30 kms)	1	SFT		0
454	Serv. for hiring Tata 407 30-50 kms	Prov. Services for material shifting of any type of material in Tata 407 or equivalent vehicle as approved by EIC, rate shall be quoted for one side travelling with max 4 workmen (for distance 30 to 50 kms)	1	SFT		0
455	Providing Concrete Pump	Prov. Services of concrete pump for grade up to M30 and distance up to 20 meter / height up to 10 meter	0.5	SFT		0
456	Providing 60 ft Manlifter(8 Hours)	Prov. Services of manlifter up to 60 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
457	Providing 60 ft Manlifter(4 Hours)	Prov. Services of manlifter up to 60 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
458	Providing 80 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 80 feet height for 8 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
459	Providing 80 Ft Manlifter(4 Hours)	Prov. Services of manlifter up to 80 feet height for 4 hours shift for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
460	Providing 100 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 100 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
461	Providing 120 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 120 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
462	Providing 150 Ft Manlifter(8 Hours)	Prov. Services of manlifter up to 150 feet height for work with all necessary documents as per Tata power safety norms with one supervisor	0.5	SFT		0
463	Prov. Diesel Operated Pump 2 HP	Prov. 2 HP submersible pump for dewatering of pits or other excavated space including diesel, transportation and operator service	0.5	SFT		0
464	P/F Scaffolding upto 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards upto 5 m height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of	2.5	M2		0
465	P/F Scaffolding Above 5 M	Providing and fixing of tubular H-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, Tata power standards from 5 m & above height including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per	2.5	M2		0

466	P/F Scaffolding at all Height	Providing and fixing of tubular h-frame scaffolding/ pipe coupling / modular cup lock scaffolding, material: steel, as per Tata power standards including covering it externally with nylon net and dismantling the same after completion of work, scaffolding material shall be in healthy condition and inspected before use by scaffolding inspector, additional information: payment will be made as per area of elevation	2.5	M3		0
467	Water Supply - Potable	Supplying potable water by tanker, rate shall be inclusive of pumping water up to 8 m height as and when required	2.5	KL		0
468	Water Supply - Boring	Supplying potable water tanker to ground level or below storage tank	2.5	KL		0
469	MAK&CUT CORE IN RCC WALL/SLAB,250MM	MAK&CUT CORE IN RCC WALL/SLAB,250MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of 160-200 mm diameter.	10	No		0
470	MAK&CUT CORE IN RCC WALL/SLAB,150MM	MAK&CUT CORE IN RCC WALL/SLAB,150MM Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 300 mm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of upto 100 diameter.	10	No		0
471	WPC Board	WPC board, Providing and fixing of WPC board, providing all equipment, material, tools, tackles etc for replacing and fixing panneling at all height.as directed by engineer in charge and approved from	15	M2		0
472	providing and fixing of Artifical green	providing and fixing of Artifical green turf wall cladding panels of make Glo panels. Quote shall include require ply backing, adhesives, tool, tackels etc required to complet the job in all respect. It will be prefered if the material used is LEED or IGBC certified	20	M2		0
473	P/F awning	providing and fixing AWNING of fix type including all necessary supports and fixing at site, stable outdoor weather proof inclduing trasportationat site, fixing at height with fixrures and fastening etc complete as directed.	15	M2		0
474	CISE,P/F services for Awning cloth repla	Providing & replacing the existing Awning cloth with new approved make cloth. Vendor should submit catalogue and take approval from Site In charge before procurement of the cloth. Rate shall include all tools, tackles, transportation, scaffolding, etc. required to carry out the works as directed by Site In Charge.	20	M2		0
475	PRVDNG&FIXING,VINYL FLOORING	SERVICE TYPE: PROVIDING AND FIXING OF VINYL FLOORING, MATERIAL: POLY VINYL CHLORIDE OF APPROPRIATE BY MIN THICK: 2 MM OF APPROVED QUALITY AND SHADE INCLUDING LEVELLING, CLEANING OF FLOOR SURFACE, LEVELLING WITH POP IF REQUIRED AND FIXING WITH RUBBER ADHESIVE AS PER MANUFACTURE SPECIFICATIONS INCLUDING CLEANING OF THE SURFACE AND HANDING OVER TO TATA POWER CO, APPROVAL SHALL BE TAKEN FOR SHADE AND THICKNESS OF VINYL FLOORING, CUTOUTS/OPENING WILL BE DEDUCTED	20	M2		0
Sub-Total						0
GST @ 18%						0
Total (Including GST)						**0**

Total for Civil maintenance work at Operational and Non-operational area	**0**

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Section E.1: Scope of Work

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CC25SVP013_Outline Agreement (OLA) of 03 years for Civil Maintenance work at Kalyan & Panvel Circle at Tata Power Transmission, Mumbai

Scope of Work: The scope of the work consists of asset management of Transmission Divisions at Kalyan Circle (Kalyan Node & Panvel Node). Routine / emergency / break down services are being requested by internal customers of Tata Power. Civil maintenance works viz. repairs to structures, Maintenance, pipelines, plumbing & Carpentry works etc. along with construction of structures of building, switchyard, is required to be carried out. These works are either planned in nature or unplanned due to emergent requirements as per need of plant.

A contractor shall be able to respond and take up these works on need basis as per quantum released. Work may involve conditions of outages, cautions, or beyond office hours too. Contractor shall maintain teams for services to be rendered by them as per requirements given by engineer In-charge.

Kalyan Circle- Kalyan & Panvel Node.

Purpose – The Purpose is to maintain the existing assets of Transmission Divisions in good condition & support the internal customer with all Civil Engineering & Maintenance services.

Period of completion: All works needs to be completed as per the customer requirements & schedule of completion given by the Internal Customer & Engineer In-Charge.

Site Specific Requirement –

1. Successful Bidder will have to deploy work force with L1, L2 & L3 Training from TATA Power Skill Development Institute as per the Policy of TATA Power Co. Ltd. All safety standard at site shall be understood and complied with Tata power Corporate Safety standards & Norms.
2. Vendor needs to arrange Power supply required for Construction purpose; Water required to carry out the work at site.
4. Successful Bidder shall prepare and submit work methodology and shall mobilize their resources as per TPC approved methodology.

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Section E.2: Service Level Agreement

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Service Level Agreement

Key Service Requirement	SLA Parameter	Penalty / Reward	Pre Requisites / Conditions
Commencement of Works	Mobilisation to complete the job within 7 days from date of PO, within 24 hrs in case of emergency.	If the work is not started from the receipt of the purchase order, 1 % of PO value penalty will be imposed.	Vendor will intimate acceptance of PO with date to concerned engineer.
Supporting / safeguarding of existing assets in the receiving station etc.	Protect in safe condition so as not to damage them	In case of any damage to existing asset during work, the cost of repairs shall be charged to the Contractor.	Proper supporting structures, tools as required to be used to safeguard it.
Vendor shall depute trained, responsible & experienced supervisor	Engineer -shall be is completed B.E / Diploma with minimum 1 year of experience Supervisor- having 5 years of experience in civil works He should have completed relevent L1, L2 & L3 certifications in TPSDI.	a) Penalty will be imposed as per standard penalty clause of Tata Power.	1.The supervisor should be present from the commencement till completion of work i.e. round the clock protection of TPC material. 2.Experience certificate of previous company or PSU 3. L1, L2 & L3 certificates from TPSDI.
Vendor shall depute trained workers at site and No violation of Tata Power Safety rules and Procedures	All workers should complete L1 training at TPSDI As per nature of work vendor should deployed L2 trained workers (Working at Height, Excavation, Confined space etc.)	a) Penalty will be imposed as per standard penalty clause of Tata Power.	L1, L2 certificates from TPSDI.
Barricading of sites & providing warning lights, sign boards for safety purposes as per requirements of Tata Power.	As per requirement of the Tata Power	Penalty will be imposed as per standard penalty clause of Tata Power.	Barricading should be as per guidelines from Tata Power
Availability of required PPE, Tools, Tackles in good working condition. No work will be carried with out proper PPE, tools & tackles	100% Compliance	Penalty will be imposed as per standard penalty clause of Tata Power.	List of required Tools / PPEs is attached as Annexure A. In case vendor does not provide tools / PPE, Tata Power shall provide the same and penalty shall be levied.
Adherence to quality, no defects due to job done by vendor till guarantee period of 24 months	No defect or quality issues should be observed during 24 Months	All rework due to non standard material or workmanship will be charged to contractor	Vendor should submit test certificate of material and MTC of Material with site engineer
Completion of Works	Completion of job on priority basis in line with schedule defined by Tata Power	a) Penalty of 3% of PO Value will be levied for non-adherence of timelines. B) The working agency may have to repeat job if any deviation or observation is found by Tata Power representative.	a) Vendor to submit Work completion report after completion of job. The reports will be approved by Tata Power representative before clearing the sit. b) Vendor to submit bills within 7 days of work completion.

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Section F: Other formats / templates

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FORMAT F.1

AFFIDAVIT (ON LETTER HEAD)

I, …….. S/o …….. Director of M/s…….. …… having its registered office at …….. do hereby solemnly affirm and declare as follows:

1. That I have been authorized to execute this affidavit on behalf of this company by the Board of Directors vide its resolution passed on …….

2. That Tata Power vide advertisement published in …….. had invited offers for Tender Reference No _____.

3. That in response to the said advertisement as stated in paragraph (2) above, our firm has submitted its proposal to Tata Power.

4. That the proposals of our firm M/s …….. containing necessary information and particulars furnished as response to the Tender Document.

5. That our firm have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial authority or a judicial pronouncement or arbitration award against our firm, nor our firm have been expelled from any project or contract by any public authority or private firm nor have had any contract terminated by any public authority or private firm for breach of our part.

6. That our firm during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against us.

That the statements made in paragraph 1 to 6 of the foregoing affidavit as above are true to my knowledge and belief and if anything is found contrary, I stand liable to be prosecuted under appropriate Act / laws in force.

Stamp:

Sign:

Name:

Place and date:

Note: In case of any arbitration / judicial proceeding / legal litigation initiated against or by the bidder in last three years then the same have to Annexed to this Affidavit

FORMAT F.2

PROFROMA OF LETTER OF UNDERTAKINGS
(To be submitted by the Bidder along with his Bid)

ON BIDDER's LETTER HEAD

Ref..... Date.....
To

Head - Procurement
The Tata Power Company Limited (Tata Power), Corporate Contracts,
Fourth Floor, Technopolis Knowledge Park, CENTEC, Mahakali Caves Road,

Chakala, Andheri (E), Mumbai 400 093.

Dear Sir,

I / We have read and examined the entire Tender Document to the …… (Full scope of work)
I / We hereby submit our Bid and undertake to keep our Bid Valid for a period of 180 days from the date of bid opening i.e. up to ……
I / We hereby further undertake that during said period.
I / We shall not vary/alter or revoke my / our Bid.
This undertaking is in consideration of Tata Power agreeing to open my Bid and consider and evaluate the same for the purpose of award of work in terms of provision of tender specifications.
Should this Bid be accepted, **I / We** also agree to abide by and fulfill all the terms & conditions of provision of the above mentioned bid documents.

Signature along with Seal of Co……..
(Duly authorized to sign the Tender on behalf of the Bidder)

Name …….

Designation ……..

E-mail (used in E-Tender):

Name of Co. ……..
(In Block Letters.)

FORMAT F.3

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder)

In a bid to make our entire procurement process more fair and transparent, Tata Power intends to use the reverse auctions through E-Tender system as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. Tata Power shall log-in to the authorized representative of the bidder.
2. Tata Power will make every effort to make the bid process transparent. However, the award decision including sharing of work would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of Tata Power, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of Tata Power.
6. Tata Power has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out-rightly rejected by Tata Power.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at Tata Power site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by Tata Power.
12. Detailed price split of E-auction price will be submitted within 24 hours from completion of E-auction. If not submitted, the original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

FORMAT F.4

Format of BID BG / EMD

Whereas (Name of the Contractor), a Company incorporated under the Indian Companies Act 1956, having its Registered office at _____, (hereinafter called the "BIDDER") has in response to your Invitation to Bid against Enquiry No. _____dated _____, for (name of work), offered to supply and/or execute the works as contained in Employers letter dated _____.

AND WHEREAS BIDDER is required to furnish to you a Bank Guarantee for the sum of Rs._____/-(Rupees ____ only) as Earnest Money against Bidder's offer as aforesaid.

AND WHEREAS we, (name of the bank) having our Registered Office at _____and Branch office at _____, have at the request of Bidder, agreed to give you this Guarantee as hereinafter contained.

NOW THEREFORE, in lieu of earnest money deposit, we, the undersigned, hereby covenant that the aforesaid Bid of the BIDDER shall remain open for acceptance by you during the period of validity as mentioned in the Bid Document or any extension thereof as requested by you and if Bidder shall for any reason back out, whether expressly or impliedly, from this said Bid during the period of its validity or any extension thereof as aforesaid, we hereby guarantee to you the payment of the sum of Rs._____/-(Rupees ____ only) on demand and without demur and notwithstanding the existence of any dispute between you and the BIDDER in this regard and we hereby further agree as follows:

(a) You shall have the right to file/make a claim on us under the Guarantee for a further period of six months from the said date of expiry.

(b) That this guarantee shall not be revoked during its currency without your written express consent.

(c) That you may without affecting this guarantee grant time or other indulgence to or negotiate further with BIDDER in regard to the conditions contained in the said Bid

document and thereby modify these conditions or add thereto any further conditions as may be mutually agreed upon between you and BIDDER.

(d) That the guarantee hereinbefore contained shall not be affected by any change in the constitution of our Bank or in the constitution of BIDDER.

(e) That any account settled between you and BIDDER shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.

(f) That this guarantee commences from the date hereof and shall remain in force till BIDDER, if his Bid is accepted by you, furnishes the Contract Performance Guarantee as required under the said specifications and executes formal Contract Agreement as therein provided or till ____Days (__days) from the date of submission of the Bid by the BIDDER i.e. (expiry date), whichever is earlier.

(g) That the expression, BIDDER and Bank, and OWNER herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successors and assignees.

(h) Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs._____/-(Rupees _____only) and the Guarantee will remain in force upto and including and shall be extended from time to time for such period or periods as may be desired by you. Unless a demand or claim under this Guarantee is received by us in writing within six months from (expiry date), i.e. on or before (claim period date), we shall be discharged from all liabilities under this guarantee thereafter.

(i) Any claim/extension under the guarantee can be lodgeable at issuing outstation bank or at Mumbai branch and claim will also be payable at Mumbai Branch. **(To be confirmed by Mumbai Branch by a letter to that effect)**

Notwithstanding anything contained herein above:

a) Our liability under this Bank Guarantee shall not exceed Rs._____/-(Rupees _____ only).

b) This Bank Guarantee shall be valid upto ---------- 200.

c) Our Liability to make payment shall arise and we are liable to pay the guaranteed amount or any part there of under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ---------- 200.

(j) Liability against this Bank Guarantee will be discharged only after issue of Discharge Letter by TPC.

FORMAT F.5

FORMAT OF PERFORMANCE BANK GUARANTEE

Note: a) Format shall be followed in toto
b) Claim period of six months must be kept up
c) The guarantee to be accompanied by the covering letter from the bank confirming the signatories to the guarantee on the Bank's letter head.

The Tata Power Co Ltd
34,Sant Tukaram Road
Carnac Bunder,
Mumbai 400 009

Our Letter of Guarantee No.....

Contract/Purchase Order No.....dated.....

1.0 You have entered into a Contract No..... with..... .....(hereinafter referred to as " the Vendor") for the supply and delivery of ..... (hereinafter referred to as "the said equipment") for the price and on the terms and conditions contained in the said contract.

2.0 In accordance with the terms of the said contract, " the Vendor" has agreed to furnish you with an irrevocable and unconditional bank guarantee in a form and from a bank acceptable to you as security for the due performance by " the Vendor" of all his contractual obligations under the said contract in an amount equal to 10% (ten percent) of the total value of the contract to be valid from the date of contract and up to __ months from the date of satisfactory commissioning of the said equipment into service or __ months from the date of delivery whichever is earlier.

3.0 In consideration thereof, we, ... hereby irrevocably and unconditionally guarantee to pay to you on demand and without demur and without reference to " the Vendor" such amount or amounts not exceeding the sum of Rs.....(Rupees ..... only) being 10% (ten percent) of the total value of the contract on receipt of your intimating that " the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfilment and " the Vendor" shall have no right to question such judgement.

4.0 You shall have the right to file/make your **claim** on us under the guarantee for a **further period of six months** from the said date of expiry.

5.0 This guarantee shall not be revoked without your express consent and shall not be affected by your granting time or any other indulgence to " the Vendor", which shall include but not be limited to, postponement from time to time of the exercise of any powers vested in you or any right which you may have against " the Vendor" and to exercise the same in any manner at any time and either to enforce or forbear to enforce any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision, have the effect of relieving our bank from its obligation under this guarantee.

6.0 We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to " the Vendor" 's liabilities in respect of the premises.

7.0 This guarantee shall not be affected by any change in the constitution of our Bank or " the Vendor" or for any other reason whatsoever.

8.0 Any claim/extension under the guarantee can be lodged at issuing outstation branch or at Mumbai branch and also become payable at our issuing outstation bank or at the Mumbai branch as per confirmatory letter/letters of the concerned bank branches as attached. **(This Confirmatory letter is to be obtained from Mumbai Branch by the vendor and submitted along with the Performance Bank Guarantee and is applicable for PBG submitted from Banks located outside Mumbai).**

9.0 Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs..... (Rupees .... only) and the guarantee will remain in force up to and including .....(Date) and shall be extended from time to time for such period or periods as may be desired by " the Vendor" .

10.0 Unless a demand or claim under this guarantee is received by us in writing within six months from ..... (expiry date) i.e. on or before .....(claim period end date) we shall be discharged from all liabilities under this guarantee thereafter.

Dated at ..... , this ..... day of .....199 .

Vendor Registration Form

Corporate Contracts

To be Filled in Block letters By Vendor. Note **Annexure 1 - CSM F1** is Mandatory for Service / Composite Vendor Registration

MATERIAL ☐ **SERVICE** ☐ **COMPOSITE** ☐ **CONSULTANT** ☐

Title (M/S., Mr., Mrs., Dr.,) *					
Company Name (35 Char) *					
Country code - Mobile No *					
Country Code - Tel. No *					
Country Code - Fax No					
Email ID *					
Street / House No *					
Country *		State *		District *	
City *		Pin code *		Language	

Category	General		MOEF		SC / ST	
	Related Party		MSME / SSI		OBC/Others	

Bank Details (all details to be filled for enabling NEFT Transfer)

Name of Bank *			
Bank Details ID *		PAN Number *	
Account No. *		Account Holder *	
Bank Key *		Bank Country *	
MICR Code * (Attach Cancelled Cheque)			
IFSC Code *			
IBAN *			
Payment thro RTGS/NEFT*			

Quality / Safety Systems (Mandatory for Service and Composite Vendor Registration

OHSAS 18001 Certified		Risk Management Process	
ISO 9001 Certified		ISO 14001 / EMS Certified	

Declaration and Vendor Authorized Signature

I / We certify that the information furnished above is correct and complete to the best of my/our knowledge and belief. If at any time, I / We are found to have concealed any material information or given any false details, my/our registration shall be liable to summary termination without notice or compensation. I / We are not related to any employee of Tata Power .

We have also received a copy of your Tata Code Of Conduct. We hereby confirm that we have read the same and understand the need to follow the same in Spirit and Letter. If we have any concerns we shall bring the same to the notice of your Chief Ethics Officer. Email: cecounsellor@tatapower.com, * Copy also available on our website http://www.tatapower.com/aboutus/code-of-conduct.aspx

Name *	
Designation *	
Email *	
Signature & Company Seal *	

ERP Vendor India Requirement - Taxation Registration Details	
LST / VAT Registration No.	
LST / VAT Registration Date	
CST / TIN Registration No.	
CST / TIN Registration Date	
Service Tax Registration. No.	
Service Tax Registration Date	
Excise Registration No.	
Excise Registration. Date	
Provident Fund No.	
ESI Registration No.	
MSME / SSI Registration No.	
MSME / SSI Registration Date	

Mandatory For SERVICE & COMPOSITE *(Material + Service)* **Vendor Registration**						
Annexure 1 - CSM F1-'Safety Category Qualification Form	YES		NO		N / A	
OSHAS 18001 Certificate	YES		NO		N / A	
ISO 9001 Certificate	YES		NO		N / A	
ISO 14001 / EMS Certificate	YES		NO		N / A	
Safety Organization Structure	YES		NO		N / A	
Safety Training Process	YES		NO		N / A	
Safety Policy	YES		NO		N / A	
Safety Statistics	YES		NO		N / A	
Address of sites where WIP	YES		NO		N / A	
Check List of Documents enclosed *(To be filled by the Vendor)*						
PAN Card Copy	YES		NO		N / A	
VAT / CST / TIN Registration Certificate	YES		NO		N / A	
Service Tax Registration Certificate (for services)	YES		NO		N / A	
Certificate of Incorporation / Partnership Deed etc	YES		NO		N / A	
Signed Conflict of Interest Declaration	YES		NO		N / A	
MSME Industry Registration (Mandatory if applicable)	YES		NO		N / A	

Evaluation Sheet

(To be filled by **Requistioner** - After Checking & Verifying Page 1 to 2 and Annexure 1 - CSM F1 Form)

Whether mandatory requirements are filled/attached and verified?	YES		NO		If No, explain reason for waiver in evaluation area	
If registration is for Services also, whether CSM F1 Form has been completed? Documents attached CSM F1 - Safety Category Qualification Form	YES		NO		N / A	
OHSAS 18001/ ISO 9001 / ISO 14001 Certificate	YES		NO		N / A	
Safety Organization Structure	YES		NO		N / A	
Safety Training Process	YES		NO		N / A	
Safety Policy	YES		NO		N / A	
Safety Statistics	YES		NO		N / A	
Evaluation Process Report	YES		NO		N / A	
Company Code & Description -						

Requested By	**Approved by (HOD)**
Name	Name
Signature	Signature
Department	Department

ERP Vendor Company Codes			
Company Code *		Sort Key *	
Reconciliation A/C *		Check Double Invoice	
With Holding Tax Country		With Hold Tax	
Terms of Payment		Payment Methods	
ERP Vendor Purchasing Organization			
Purchasing Organization *		Order Currency *	
Schema Group *		Sales Person *	
ABC Indicator *		Terms of Payment	
Service Based Invoice		GR Based Invoice	

ANNEXURE – 1 (CSM F1 - Safety Category Qualification Form)

Type of Vendor - **Service** / **Composite** *(Material + Service)*

Name of the Vendor -

No	Safety Information	Remarks	Attachments		
1	**Certificate**				
1A	OHSAS : 18001	Yes / No			
1B	ISO : 14001	Yes / No			
1C	ISO : 9001	Yes / No			
2	**Safety Statistics for Last Three (03) Years**		**Year 1**	**Year 2**	**Year 3**
2A	LTIFR – Lost Time Injury Frequency Rate	Yes / No			
2B	LTISR – Lost Time Injury Severity Rate	Yes / No			
3	**Safety Training Process**	Yes / No			
4	**Safety Organization Structure**	Yes / No			
5	**Safety Policy**	Yes / No			
6	**Name and Address of Sites where work are in Progress or worked earlier**	Yes / No			

Name, Signature & Company Seal

To be filled by the Tata Power Requestor Vendor to be registered for CATEGORY **A** **B** **C**

1) **Category A**- Vendors eligible to carry out High risk Jobs
2) **Category B**- Vendors eligible to carry out technical jobs that are low risk
3) **Category C**- Vendors eligible to carry out administrative and office jobs

No	Description	Category "A"	Category "B"	Category "C"
1	Does the Contractor have OHSAS 18001 Certificate?	√		
2	During site visit check for safety adequacy at site	√	√	
3	Check the safety statistics of Contractor	√	√	√
4	Check the safety orientation & training process of contractor	√	√	√
5	Check the organization structure for safety professionals / engineers / supervisors	√	√	
6	Certified / skill workers as a percentage overall work force	√	√	
7	Does the Contractor have ISO 9001 Certificate?		√	√

ANNEXURE – 2 (Conflict of Interest Certification)

Objective

The intent of this disclosure is NOT to prevent an aspirant supplier from making an application, but rather to provide the decision making authorities with information on which Tata Power can make its own judgements and ensure that dealing with such parties is done fairly and transparently by ensuring that people / parties in conflict of interests are involved in the transactions / decision making process.

While requesting a registration, a supplier MUST disclose any actual or potential conflict of interest by giving the details of the person/s within the supplier's company (whether a director or an employee) who may be in actual or potential conflict of interest as per the above referred clause 20 of Tata Code of Conduct.

Conflict of Interest

An actual or potential conflict of interest with supplier's may arise where, directly or indirectly.

a. A proprietor or partner or director or employee (who is party to a transaction) of the supplier is also a member of family or relative of a Tata Power employee.

b. A proprietor or partner or director or employee (who is party to a transaction) of the supplier is also a director of family or relative of a Tata Power or Tata Group of companies or a person of influence within Tata Power.

c. A proprietor or partner or director of the company is also a proprietor or partner or director in another company already registered with Tata Power and competing for similar products and / or services.

d. A company has subsidiary or associate companies already registered with Tata Power and competing for similar products and / or purpose.

For detailed explanation on when an actual or potential conflict of interest may arise, please refer to the clause 20 of Tata Code of Conduct available on the Tata Power website

www.tatapower.com/aboutus/code-of-conduct.aspx

Format for declaration

Supplier's willing to register with Tata Power need to print the enclosed form which should be printed on the Letter Head of their company and be signed by proprietor / partner / executive directors / person authorized by the company for giving such declaration affixing his name, designation below the signature along with seal of the company.

To

Corporate Contracts
The Tata Power Company Ltd
Technopolis Knowledge Park, CENTEC,
Mahakali Caves Road, Chakala,
Andheri (E), Mumbai 400 093

Declaration on Conflict of Interest

This is to certify that we, M/s _____ are having the following entities / persons in actual or potential conflict of interest while dealing with Tata Power within the spirit of Clause 20 of Tata Code of Conduct.

Name & Designation of the entity / person in conflict of interest	Name of Tata Power person to whom related to	Nature of relationship / conflict

Note – In case there is no conflicts to be declared, please clarify state as NIL in the first row and strike out the balance lines)

This is to further certify that, we M/s _____

a. Are not dealing with Tata Power under any other name or through any other subsidiary / associate companies other than the list disclosed above.

b. None of our other directors / partners / other proprietors is dealing with Tata Power under any other company name.

c. None of the other directors / partners / proprietors / employees holding a position of responsibility and / or authorized to transact with Tata Power has any significant financial interest or other relationship i.e., (Father, Mother, Brother, Sister or any other close family relationship) with any other Tata Power employee or directors of Tata Power or directors of Tata group of companies.

We further declare that as and when there is any change to the above certification, we shall intimate to Tata Power about such changes in the status. We also declare that we have read and understood the Tata Code of Conduct – latest version hosted on Tata Power website www.tatapower.com/aboutus/code-of-conduct.aspx and shall abide by all the provisions of the same and will bring any concerns regarding this to the notice of your chief ethics officer on the email id cecounsellor@tatapower.com

This is to certify that the above said information is true to the best of my knowledge and that I have the requisite authority to sign above said declaration in my capacity as _____ (ID No. _____)

Regards,

Name, Signature and Company Seal

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Section G: Policies

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HEALTH AND SAFETY POLICY

We, at Tata Power, reaffirm our belief that the health and safety of our stakeholders is of the utmost importance and takes precedence in all our business decisions. In pursuit of this belief and commitment, we strive to:

- Maintain and proactively improve our management systems to minimize health and safety hazards to our stakeholders and all others influenced by our activities.
- Comply and endeavour to exceed all applicable occupational health & safety legal and other requirements by setting the highest standards.
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels, for improving and sustaining health & safety performance.
- Involve our employees in maintaining a safe and healthy work environment through risk assessments, periodic reviews of operational procedures, safe work methods and adoption of new technology.
- Develop a culture of safety through active leadership and provide appropriate training at all levels to enable employees developing their skills to work safely.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Ensure availability at all times of appropriate resources to fully implement the health & safety policy of the company.
- Promptly report incidents, investigate for root causes and ensure lessons learnt shared and deployed across the company.
- Ensure service providers and their workmen align with company's safety codes and practices for the health and safety of personnel working with us.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve performance.

We shall actively communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER
Lighting up Lives!

CORPORATE ENVIRONMENT POLICY

Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:

- Complying with the requirements and spirit of applicable environmental laws and striving to exceed required levels of compliance wherever feasible
- Ensuring that our employees are trained to acquire the necessary skills to meet environmental standards
- Conserving natural resources by improving efficiency and reducing wastage
- Making business decisions that aim towards sustainable development
- Engaging with stakeholders to create awareness on sustainability

Date: 15th June, 2018

(Praveer Sinha)
CEO & Managing Director

TATA POWER
Lighting up Lives!

CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
    - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
    - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
    - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
    - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
    - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER
Lighting up Lives!