

**NOTICE INVITING TENDER**

**FOR**

**ENGAGEMENT OF PMC FOR PROVIDING CONSULTANCY SERVICES FOR  
CONSTRUCTION OF RAILWAY SIDING FACILITY” FOR COAL BASED AMMONIA UREA  
PROJECT OF TFL AT TALCHER ANGUL DISTRICT, ODISHA.**

**(NIT No: PNMM/PC-183/E-4014/NCB DATED 10.12.2021)**



**TALCHER FERTILIZERS LIMITED**

**[A JOINT VENTURE OF M/s GAIL (INDIA) LIMITED (GAIL), M/s RASHTRIYA CHEMICALS  
& FERTILIZERS LTD. (RCF), M/s COAL INDIA LTD. (CIL),  
& M/s FERTILIZER CORPORATION OF INDIA LTD (FCIL)]**

**ISSUED BY**



**PROJECTS & DEVELOPMENT INDIA LTD.  
(A Govt. Of India Enterprise)  
PDIL BHAWAN, A-14, Sector-1,**



**10.12.2021**

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**SECTION-I**

**"INVITATION FOR BID (IFB)"**

*(Limited Tender through E-Tendering)*

Ref. No. : PNMM/PC-183/E-4014/NCB

Date: 10.12.2021

To,

**SHORTLISTED BIDDERS**

**SUB: TENDER DOCUMENT FOR ENGAGEMENT OF PMC FOR PROVIDING CONSULTANCY SERVICES FOR CONSTRUCTION OF RAILWAY SIDING FACILITY" FOR COAL BASED AMMONIA UREA PROJECT OF TFL AT TALCHER ANGUL DISTRICT, ODISHA**

Dear Sir/Madam,

- 1.0 GAIL (India) Limited (GAIL), Rashtriya Chemicals & Fertilizers Limited (RCF), Coal India Limited (CIL) and Fertilizer Corporation of India Limited (FCIL) have formed a Joint Venture company in the name of Talcher Fertilizers Limited (TFL) hereinafter also referred to as "Owner", intends to *Engage an agency for "PMC services for construction of railway siding facility "* for Coal based Ammonia Urea Project of TFL at Talcher Angul district, Odisha, India.
- 1.2 GAIL (India) Limited is a Public Sector Unit under the Ministry of Petroleum & Natural Gas and Rashtriya Chemicals & Fertilizers Limited (RCF) & Fertilizer Corporation of India Limited (FCIL) are two Public Sector Units under the Ministry of Chemicals & Fertilizers and Coal India Limited (CIL) is a Public Sector Unit under the Ministry of Coal, Govt. of India.
- 1.3 Projects and Development India Limited (PDIL), hereinafter referred to as CONSULTANT on behalf of M/s Talcher Fertilizers Ltd. (TFL), hereinafter referred as OWNER, has the pleasure of inviting bids from shortlisted domestic bidders to submit Bid ONLINE through Central Public Procurement (CPP) Portal under Single Stage Two Bid System, for the subject works.
- 2.0 The brief details of the tender are as under:

<b>(A)</b>	NAME OF JOB/ BRIEF SCOPE OF WORK	<b>Engagement of PMC for providing consultancy services for Construction of Railway Siding Facility" for Coal Based Ammonia Urea Project of TFL at Talcher Angul District, Odisha</b>					
<b>(B)</b>	TENDER NO. & DATE	PNMM/PC-183/E-4014/NCB DATED 10.12.2021					
<b>(C)</b>	TYPE OF BIDDING SYSTEM	<table border="1"><tr><td>SINGLE BID SYSTEM</td><td style="text-align: center;">X</td></tr><tr><td>TWO BID SYSTEM</td><td style="text-align: center;">√</td></tr></table>		SINGLE BID SYSTEM	X	TWO BID SYSTEM	√
SINGLE BID SYSTEM	X						
TWO BID SYSTEM	√						
<b>(D)</b>	TYPE OF TENDER	<table border="1"><tr><td>E-TENDER</td><td style="text-align: center;">√</td></tr><tr><td>MANUAL TENDER</td><td style="text-align: center;">X</td></tr></table>		E-TENDER	√	MANUAL TENDER	X
E-TENDER	√						
MANUAL TENDER	X						

<b>(E)</b>	COMPLETION/CONTRACT PERIOD	Please Refer Clause 2.0 of Special Conditions of Contract.				
<b>(F)</b>	AVAILABILITY OF TENDER DOCUMENT ON WEBSITE(S)	i. CPP Portal ( <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> ) ii. TFL ( <a href="http://tflonline.co.in">http://tflonline.co.in</a> ) iii. PDIL ( <a href="https://www.pdilin.com">https://www.pdilin.com</a> )				
<b>(G)</b>	BID EVALUATION CRITERIA (BEC)	<table border="1"> <tr> <td>APPLICABLE</td> <td>X</td> </tr> <tr> <td>NOT APPLICABLE</td> <td>√</td> </tr> </table>	APPLICABLE	X	NOT APPLICABLE	√
APPLICABLE	X					
NOT APPLICABLE	√					
<b>(H)</b>	LAST DATE OF RECEIPT OF BIDDER'S PRE-BID QUERIES	15.12.2021				
<b>(I)</b>	<b>PRE-BID MEETING</b>					
<b>i.</b>	DATE, TIME & VENUE OF PRE-BID MEETING	Date : 17.12.2021 Time : 11:30 hrs.(IST) Venue : (Through Video Conferencing)				
<b>ii.</b>	PRE-BID MEETING LINK	<a href="#">Click here to join the meeting</a>				
<b>(J)</b>	BID SUBMISSION START DATE	Date : 23.12.2021 Time : 15:00 Hrs				
<b>(K)</b>	DUE DATE & TIME OF BID-SUBMISSION	Date : 30.12.2021 Time : 15:00 Hrs				
<b>(L)</b>	DATE AND TIME OF UN-PRICED BID OPENING	Date : 31.12.2021 Time : 15:00 Hrs				
<b>(M)</b>	Address for Communication:					
<b>(i)</b>	PDIL	M/s Projects & Development India Limited, P.D.I.L Bhawan, A-14, Sector-1, Noida, (PIN 201301) Dist. Gautam Budh Nagar (UP). (India)  Kind Attention: Mr. P.R. Sahu, Addl. General Manager (M.M) Fax no. : +91-120-2529801 Tel no. : +91-120-2544063  E-mail : <a href="mailto:prsahu@pdilin.com">prsahu@pdilin.com</a> <a href="mailto:anjali@pdilin.com">anjali@pdilin.com</a> <a href="mailto:alam@pdilin.com">alam@pdilin.com</a>				
<b>(ii)</b>	TFL	M/s Talcher Fertilizers Ltd. (TFL), C/O GAIL Training Institute, PARC Building, Plot No. 24, Sector-16A, Film City, Noida District – G.B. Nagar, U.P. - 201301  Kind Attention : Mr. A.PUKINI (DGM Projects) Tel No. : +91-9599903561 E-mail : <a href="mailto:apukini@gail.co.in">apukini@gail.co.in</a>				

<b>(N)</b>	Original Documents to be submitted at	Projects & Development India Limited, (Materials Management Department) P.D.I.L Bhawan, A-14, Sector-1, Noida, (PIN 201301) Dist. Gautam Budh Nagar (UP). (India)  Kind Attention: Mr. P.R. Sahu, Addl. General Manager (M.M) Fax no. : +91-120-2529801 Tel no. : +91-120-2544063. E-mail : prsahu@pdilin.com
<b>(O)</b>	Contact Person for Site visit	M/s Talcher Fertilizers Ltd. (TFL), Administrative Building, Talcher, Post: Vikrampur, Dist: Angul, Pincod-759106, Odisha  Kind Attention: Mr. Panchanan Halder, General Manager (PE)  Tel No. : +91-9999692275 E-mail : phaldar@gail.co.in

In case of the days specified above happens to be a holiday in TFL/PDIL, the next working day shall be implied.

- 3.0 Bids must be submitted strictly in accordance with Clause No. 10 of ITB depending upon Type of Tender as mentioned at Clause no. 2.0 (D) of IFB. The IFB is an integral and inseparable part of the Tender Document.
- 4.0 Being an e-tendering process, the following documents in addition to uploading its scanned copy(ies) in the bid on CPP e-Portal shall also be submitted in Original (in physical form) within 7 (seven) days from the bid due date to the address mentioned in Bid Data Sheet(BDS):
  - Power of Attorney
  - Declaration for Bid Security
  - Integrity Pact
- 5.0 Bidder(s) are advised to quote strictly as per terms and conditions of the tender documents and not to stipulate any deviations/exceptions.
- 6.0 This tender is a limited tender and hence is issued to only shortlisted bidders / firms. The Tender Document is also hosted on TFL's (<http://tflonline.co.in>) & PDIL (<https://www.pdilin.com>) website for information only to firms other than shortlisted firms / bidders. Further, it is also not permissible to transfer this invitation to any other firm.
- 7.0 The Tender Document calls for offers on single point "Sole Bidder" responsibility basis and in total compliance of Scope of Works as specified in Tender Document.
- 8.0 Clarification(s)/Corrigendum(s) if any shall also be available on above referred websites. Any revision, clarification, addendum, corrigendum, time extension, etc. to this Tender Document will be hosted on the above mentioned website(s) only. Bidders are requested to visit the website regularly to keep themselves updated.

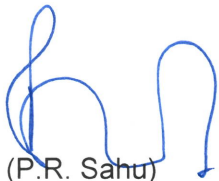
- 9.0 All the bidders including those who are not willing to submit their bid are required to submit F-4 (Acknowledgement cum Consent letter) duly filled within 7 days from receipt of tender information.
- 10.0 TFL/PDIL reserves the right to reject any or all the bids received at its discretion without assigning any reason whatsoever.
- 11.0 Procurement through GeM in future by TFL

Government of India has introduced an online procurement portal – ‘Government e-Marketplace (GeM)’ with the aim to transform the way in which public procurement of goods and services is done by the Government Ministries/Departments, PSUs, autonomous bodies etc. GeM aims to enhance transparency, efficiency and speed in public procurement.

TFL is already registered on GeM and have started procurement through GeM. You are, therefore, requested to kindly register your organization and your products on GeM at the earliest. The detailed process of registration is available on GeM Portal (i.e. <https://gem.gov.in/>).

This is not an Order.

Thanking You



(P.R. Sahu)  
Addl. General Manager (M.M)  
Projects & Development India Limited  
Tel No. : +91-120-2544063  
E-mail : prsahu@pdilin.com

**DO NOT OPEN - THIS IS A QUOTATION**

**PHYSICAL DOCUMENTS**

**Bid Document No.** : .....

**Description** : Engagement of PMC for providing consultancy services for Construction of Railway Siding Facility” for Coal Based Ammonia Urea Project of TFL at Talcher Angul District, Odisha

**Due Date& Time** : .....

<b>From:</b> ..... .....	<b>To:</b> <b>M/s Projects &amp; Development India Limited,</b> <b>P.D.I.L Bhawan, A-14, Sector-1,</b> <b>Noida, (PIN 201301)</b> <b>Dist. Gautam Budh Nagar (UP). (India)</b> <b>Kind Attention:</b> <b>Mr. P.R.Sahu, Addl. General Manager (M.M)</b>
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**(To be pasted on the envelope containing Physical documents i.e. Power of Attorney, Declaration for Bid Security & Integrity Pact)**



## SECTION-II

### **1.0 Registration with EAST COAST RAILWAYS.**

Bidder shall be a "Registered/Approved Consultant" with East Coast Railways. Bidder is required to submit self attested copy of certificate / letter issued by East Coast Railways for the same along with unpriced bid. Failure to submit certificate / letter may result in rejection of bid.



## **SECTION-II**

### **2.0 Evaluation Methodology:**

- a) The said job involves detailed Engineering, PMC work and Site Supervision basic hence the bidder shall be required to quote consultancy charges on "LUMPSUM" basis only as per Scope of work defined in Technical Section VI of ITB.
- b) The financial comparison for selection of Lowest (L1) Bidder shall be arrived at Quoted "Total Lumpsum Consultancy Fee including GST" as indicated by the bidder in the format of "SCHEDULE OF RATES".

**Note:** The service(s) are not splittable and therefore the order will be placed on overall lowest evaluated cost basis. In case of a tie at the lowest bid (L1) position between two or more bidders, the Order/ DLOA will be placed on the bidder who has higher/ highest turnover in last audited financial year.

**SECTION-III**

**INSTRUCTION TO BIDDERS**

**(TO BE READ IN CONJUNCTION WITH BIDDING DATA SHEET (BDS))**

**INSTRUCTION TO BIDDERS**

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**INSTRUCTIONS TO BIDDERS [ITB]**  
**(TO BE READ IN CONJUNCTION WITH BIDDING DATA SHEET (BDS))**

**[A] – GENERAL**

**1. SCOPE OF BID**

- 1.1 The Employer/Client as defined in the "Bidding Data Sheet [BDS]", wishes to receive Bids as described in the Invitation For Bid (the "**Tender Document /Bid Document**") issued by Employer. Employer/Owner/Client occurring herein under shall be considered synonymous.
- 1.2 Scope of Bid: The Scope of Work/ Terms of Reference shall be as defined in the Tender Documents.
- 1.3 The successful bidder will be expected to complete the scope of Bid within the period stated in Special Conditions of Contract.
- 1.4 Throughout the Tender Documents, the terms 'Bid', 'Tender', 'Proposal' & 'Offer' and their derivatives [Bidder/Tenderer, Bid/Tender/Offer etc.] are synonymous. Further, 'Day' means 'Calendar Day' and 'Singular' also means 'Plural'.

**2. ELIGIBLE BIDDERS**

- 2.1 Provision for procurement from a bidder which shares a land border with India has been attached as **Annexure-VI** herewith.
- 2.2 The Bidder shall not be under a declaration of ineligibility by Employer for Corrupt/ Fraudulent/ Collusive/ Coercive practices, as defined in "Instructions to Bidders [ITB], Clause No. 35" (Action in case Corrupt/ Fraudulent/ Collusive/ Coercive Practices).
- 2.3 The Bidder is not put on „Holiday“ by TFL or Public Sector Consultant (like EIL, MECON only due to “poor performance” or “corrupt and fraudulent practices”) or banned/blacklisted by Government department/ Public Sector on due date of submission of bid. Further, neither bidder nor their allied agency/(ies) (as defined in the Procedure for Action in case of Corrupt/ Fraudulent/ Collusive/ Coercive Practices) are on banning list of TFL or any of the JV partner of OWNER viz. GAIL, RCF, CIL, FCIL or the Ministry of Chemicals & Fertilizers

If the Tender Documents were issued inadvertently/ downloaded from website, offers submitted by such bidders shall not be considered for opening/ evaluation/Award. Further, the Bidder should not be under any liquidation, court receivership or similar proceedings on due date of submission of bid.

In case of change in status of above declaration prior to award of contract and during execution, it shall be bidder's sole responsibility to inform the same to TFL on immediate basis. Concealment of the facts shall tantamount to misrepresentation of facts and shall lead to action against such Bidders as per clause 35 of ITB.

- 2.4 The Bidder should not be under any liquidation court receivership or similar proceedings on due date of submission of bid. In case there is any change in status of the declaration prior to award of contract, the same has to be promptly informed to TFL by the bidder.

It shall be the sole responsibility of the bidder to inform TFL there status on above on due date of submission of bid and during the course of finalization of the tender. Concealment of the facts shall tantamount to misrepresentation of facts and shall lead to action against such Bidders as per clause no.35 of ITB.

- 2.5 Deleted

- 2.6 Power of Attorney:

Power of Attorney to be issued by the bidder in favour of the authorised employee(s), in respect of the particular tender, for purpose of signing the documents including bid, all subsequent communications, agreements, documents etc. pertaining to the tender and act and take any and all decision on behalf of the bidder. Any consequence resulting due to such signing shall be binding on the Bidder.

- (l) In case of a single Bidder, the power of Attorney shall be issued as per the constitution of the bidder as below:
  - a) **In case of Proprietorship:** By Proprietor
  - b) **In case of Partnership:** by all Partners or Managing Partner.
  - c) **In case of Limited Liability Partnership:** by any bidder's employee authorized in terms of Deed of LLP.
  - d) **In case of Public /Limited Company:** POA in favour of authorized employee(s) by Board of Directors through Board Resolution or by the designated officer authorized by Board to do so. Such Board Resolution should be duly countersigned by Company Secretary / MD / CMD / CEO.

The Power of Attorney should be valid till award of contract/order to successful bidder.

- 2.7 In case of change of constitution of bidder after submission of bid, the same shall be informed by the bidder to TFL promptly. Failure to same shall be considered as misrepresentation by the bidder.

### **3. ONE BID PER BIDDER**

- 3.1 A Bidder shall submit only 'one [01] Bid' in the same Bidding Process either as single entity or as a member of any consortium (wherever consortium bid is allowed). A Bidder who submits or participates in more than 'one [01] Bid' will cause all the proposals in which the Bidder has participated to be disqualified.
- 3.2 More than one bid means bid(s) by bidder(s) having same Proprietor / Partners / Limited Liability Partner in any other Bidder (s). Further, more than one bids shall also include two or more bidders having common power of attorney holder.

Failure to comply this clause during tendering process will disqualify all such bidders from process of evaluation of bids.

- 3.3 Alternative Bids shall not be considered.
- 3.4 The provisions mentioned at sl. no. 3.1 and 3.2 shall not be applicable wherein bidders are quoting for different Items / Sections / Parts / Groups/ SOR items of the same tender which specifies evaluation on Items / Sections / Parts / Groups/ SOR items basis.

**(Note: BIDS FROM "JOINT VENTURE"/"CONSORTIUM"- NOT APPLICABLE)**

### **4. COST OF BIDDING**

The Bidder shall bear all costs associated with the preparation and submission of the Bid including but not limited to Documentation Charges, Bank charges, all courier charges, translation charges, authentication charges and any associated charges including taxes & duties thereon. Further, TFL will in no case, be responsible or liable for these costs, regardless of the outcome of the bidding process.

## **5. SITE VISIT**

- 5.1 The Bidder is advised to visit and examine the site of job and its surroundings, obtain all information that may be necessary for preparing the Bid and entering into a Contract, on its own costs.

The Bidder or any of its personnel or agents shall be granted permission by the Employer to enter upon its premises and land for the purpose of such visits, but only upon the express conditions that the Bidder, its personnel and agents will release and indemnify the Employer and its personnel, agents from and against all liabilities in respect thereof, and will be responsible for death or injury, loss or damage to property, and any other loss, damage, costs, and expenses incurred as a result of inspection.

- 5.2 The Bidder shall not be entitled to hold any claim against TFL for non-compliance due to lack of any kind of pre-requisite information as it is the sole responsibility of the Bidder to obtain all the necessary information with regard to site, surrounding, working conditions, weather etc. on its own before submission of the bid.

## **[B] – TENDER DOCUMENTS**

### **6. CONTENTS OF TENDER DOCUMENTS**

- 6.1 The contents of Bidding Documents / Tender Documents are those stated below and should be read in conjunction with any 'Addendum / Corrigendum' issued in accordance with "ITB: Clause-8":

- Section-I : Invitation for Bid [IFB]
- Section-II : Registration with East Cost Railway & Evaluation methodology
- Section-III : Instructions to Bidders [ITB] with Annexures & Formats
- Section-IV : General Conditions of Contract [GCC]
- Section-V : Special Conditions of Contract-[SCC]
- Section-VI : Terms of Reference / Scope of Work
- Section-VII : Schedule of Rates

\*Request for Quotation", wherever applicable, shall also form part of the Bidding Document.

For participation in e-tender, instructions are mentioned at Annexure-III to Section-III.

- 6.2 It shall be considered that the Bidder has read, examined, understood and accepted all the instructions, forms, terms & conditions in the Tender Documents. Failure to furnish all information required by the Tender Documents or submission of a Bid not substantially responsive to the Tender Documents in every respect will be at Bidder's risk and may result in the rejection of his Bid.

### **7. CLARIFICATION OF TENDER DOCUMENTS**

- 7.1 In case of any clarification(s) on the Tender Documents, the prospective Bidder should furnish relevant format duly filled properly and mentioning the query(ies) to Authorized Signatory in writing or by fax or email no later than 02 (two) days prior to pre-bid meeting (in cases where pre-bid meeting is scheduled) or 05 (five) days prior to the due date of submission of bid (in case of No pre-bid meeting is scheduled). TFL reserves the right to ignore the bidders clarification if received after the aforesaid period. TFL may respond in writing to the request for relevant clarification(s). TFL's response to such query, but

without identifying the source of the query will be uploaded on TFL's tendering web site /portal and also shall be communicated to prospective bidders by e-mail/ fax.

- 7.2 Any clarification not received by the Employer within time period, is liable to be considered as "no clarification / information required".

## **8. AMENDMENT OF TENDER DOCUMENTS**

- 8.1 At any time prior to the 'Bid Due Date', Owner may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Tender Documents by addenda/ corrigendum.
- 8.2 Any addendum/ corrigendum thus issued shall be integral part of the Tender Document and shall be hosted on the websites where Tender Document was uploaded. Bidders have to take into account all such addendum/ corrigendum before submitting their Bid.
- 8.3 If consider necessary, TFL may extend the date of submissions of Bid in case any amendment is issued.

## **[C] – PREPARATION OF BIDS**

### **9. LANGUAGE OF BID:**

All the contents of the bid as prepared by the Bidder and all correspondence(s) shall be written in English language only. In case a document, certificate, printed literature etc. furnished by the Bidder in a language other than English, the same should be accompanied by an English translation as per instructions mentioned in Section-II. Metric measurement system shall be applied.

### **10. DOCUMENTS COMPRISING THE BID**

#### **10.1 Deleted**

- 10.2 Bidders are requested to refer instructions for participating in E-Tendering enclosed herewith as Annexure-III to Section-III and the ready reckoner for bidders available in <https://eprocure.gov.in/eprocure/app>. Bids submitted manually shall be rejected, the bids must be submitted on E-tendering website of CPP portal (<https://eprocure.gov.in/eprocure/app>) comprising following documents:-

#### **10.2.1 PART-I: "TECHNO-COMMERCIAL/UN-PRICED BID" shall contain the following:**

- (a) 'Covering Letter' on Bidder's 'Letterhead' clearly specifying the enclosed contents.
- (b) 'Bidder's General Information', as per 'Form F-1'.
- (c) As a confirmation that the prices are quoted in requisite format complying with the requirements copy of Schedule of Rate (SOR) with prices blanked out mentioning quoted / not quoted (as applicable) written against each item.
- (d) 'Letter of Authority' on the Letter Head, as per 'Form F-2'
- (e) Relevant 'Agreed Terms and Conditions', as per 'Form F-3'
- (f) 'Acknowledgement cum Consent Letter', as per 'Form F-4'
- (g) Copy of registration certificate with East Coast Railway as per Section-II, Power of Attorney /copy of Board Resolution, in favour of the authorized signatory of the Bid, as per clause no.2.6 of ITB



- (h) Undertaking regarding Provisions for Procurement from a bidder which shares a land border with India as per „Form 1 and Form-2 attached with Annexure VI.
- (i) All forms and Formats including Annexures
- (j) Power of Attorney (F-14).
- (k) Integrity Pact (F-15)
- (l) Tender Document along with all Amendments/Corrigendum/Addendum, if any duly signed/ digitally signed by the Authorized Signatory.
- (m) Additional document specified in Bidding Data Sheet (BDS).
- (n) Any other information/details required as per Tender Document
- (o) Declaration for Bid Security as per provision of ITB.
- (p) Undertaking as per Form-1 to Annexure-V to Section-III by MSE bidders and Bidders seeking preference under Policy for purchase preference linked with Local Content (PP-LC), if applicable.
- (q) Certification from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies) as per Form-I to Annexure-V and Declaration by bidder towards Minimum Local Content as per Form-II of Annexure-V.

Further, Bidders must submit the original " Power of Attorney, Integrity Pact (wherever applicable) and any other documents specified in the Tender Document (as per clause no.4.0 of IFB, Section-I) to the address mentioned in IFB, in a sealed envelope, super scribing the details of Tender Document (i.e. tender number & tender for) within 7 days from the date of un-priced bid opening.

**Note:** All the pages of the Bid must be signed by the "Authorized Signatory" of the Bidder holding POA.

#### **10.2.2 PART-II: PRICE BID**

The Prices are to be filled strictly in the Schedule of Rate of the Tender Documents and provision mentioned below and to uploaded in SOR attachment/Conditions of E-tendering portal.

- i. The Prices are to be submitted strictly as per the Schedule of Rate of the Tender Documents. TFL shall not be responsible for any failure on the part of the bidder to follow the instructions.
- ii. Bidders are advised NOT to mention Rebate/Discount separately, either in the SOR format or anywhere else in the offer. In case Bidder(s) intend to offer any Rebate/Discount, they should include the same in the item rate(s) itself under the "Schedule of Rates (SOR)" and indicate the discounted unit rate(s) only.
- iii. If any unconditional rebate has been offered in the quoted rate the same shall be considered in arriving at evaluated price. However no cognizance shall be taken for any conditional discount for the purpose of evaluation of the bids.
- iv. In case, it is observed that any of the bidder(s) has/have offered suo-moto Discount/Rebate after opening of unpriced bid but before opening of price bids such discount /rebate(s) shall not be considered for evaluation. However, in the event of the bidder emerging as the lowest evaluated bidder without considering the discount/rebate(s), then such discount/rebate(s) offered by the bidder shall be considered for Award of Work and the same will be conclusive and binding on the bidder.

- v. In the event as a result of techno-commercial discussions or pursuant to seeking clarifications / confirmations from bidders, while evaluating the un-priced part of the bid, any of the bidders submits a sealed envelope stating that it contains revised prices; such bidder(s) will be requested to withdraw the revised prices failing which the bid will not be considered for further evaluation.

## 11.0 **SCHEDULE OF RATES / BID PRICES**

- 11.1 Unless stated otherwise in the Tender Documents, the Contract shall be for the whole Scope of Work as described in Tender Documents, based on the rates and prices submitted by the Bidder and accepted by the Employer. The prices quoted by the Bidders will be inclusive of all taxes except **GST (CGST & SGST/UTGST or IGST)**.
- 11.2 Prices must be filled in format for "Schedule of Rates [SOR]" enclosed as part of Tender document. If quoted in separate typed sheets and any variation in item description, unit or quantity is noticed; the Bid is liable to be rejected.
- 11.3 Bidder shall quote for all the items of "SOR" after careful analysis of cost involved for the performance of the completed item considering all parts of the Tender Document. In case any activity though specifically not covered in description of item under "SOR" but is required to complete the works as per Scope of Work / Service, Standards, General Conditions of Contract ("GCC"), Special Conditions of Contract ("SCC") or any other part of Tender Document, the prices quoted shall deemed to be inclusive of cost incurred for such activity.
- 11.4 All duties, taxes and other levies [if any] payable by the PMC under the Contract, or for any other cause except final **GST (CGST & SGST/ UTGST or IGST)** shall be included in the rates / prices and the total bid-price submitted by the Bidder. Bidder shall indicate applicable rate of GST (CGST & SGST/ UTGST or IGST) in SOR.
- 11.5 Prices quoted by the Bidder, shall remain firm and fixed and valid until completion of the Contract and will not be subject to variation on any account.
- 11.6 Further, Bidder shall also mention the **Service Accounting Codes (SAC) / Harmonized System of Nomenclature (HSN)** at the designated place in Agreed Terms & Conditions.

## 12 **GST (CGST & SGST/ UTGST or IGST)**

- 12.1 Bidders are required to mention the GST Registration number in bids wherever **GST (CGST & SGST/UTGST or IGST)** is applicable
- 12.2 Please note that the responsibility of payment of **GST (CGST & SGST or IGST or UTGST)** lies with the Service Provider only. Service Provider providing taxable service shall issue tax Invoice/ Bill, as the case may be as per rules/ regulation of GST. Further, returns and details required to be filled under GST laws & rules should be timely filed by Service Provider with requisite details.

Payments to Service Provider for claiming **GST (CGST & SGST/UTGST or IGST)** amount will be made provided the above formalities are fulfilled. Further, TFL may seek copies of challan and certificate from Chartered Accountant for deposit of **GST (CGST & SGST/UTGST or IGST)** collected from Owner.

- 12.3 In case CBIC (Central Board of Indirect Taxes and Customs)/ any equivalent Central Government agency/ State Government agency brings to the notice of TFL that the Supplier of Goods / Services (Service Provider) has not remitted the amount towards **GST (CGST & SGST/UTGST or IGST)** collected from TFL to the government exchequer, then, that PMC shall be put under Holiday list of TFL for a period of six months after following the due procedure. This action will be in addition to the right of recovery of financial implication arising on TFL.
- 12.4 For statutory variation in GST (CGST & SGST/UTGST or IGST), please refer clause no. 8.0 of GCC (Section IV of NIT)
- 12.5 TFL will reimburse **GST (CGST & SGST/UTGST or IGST)** to the PMC at actuals against submission of Tax Invoices as per format specified in rules/ regulation of GST, subject to any statutory variations, except variations arising due to change in turnover.
- 12.6 TFL will prefer to deal with registered PMCs under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.

However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST (**CGST & SGST/UTGST or IGST**) while evaluation of bid (if applicable as per Govt. Act/ Law in vogue).

- 12.7 In case TFL is required to pay entire/certain portion of applicable **GST (CGST & SGST/UTGST or IGST)** and remaining portion, if any, is to be deposited by Bidder directly as per **GST (CGST & SGST/UTGST or IGST)** laws, entire applicable rate/amount of **GST (CGST & SGST/UTGST or IGST)** to be indicated by bidder in the SOR.

Where TFL has the obligation to discharge **GST (CGST & SGST/UTGST or IGST)** liability under reverse charge mechanism and TFL has paid or is /liable to pay **GST (CGST & SGST/UTGST or IGST)** to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to TFL or ITC with respect to such payments is not available to TFL for any reason which is not attributable to TFL, then TFL shall be entitled to deduct/ setoff / recover such amounts against any amounts paid or payable by TFL to PMC.

#### **12.8 RECONCILIATION BETWEEN GSTR 2A AND INPUT TAX CREDIT**

Supplier shall ensure timely submission of correct e-Invoice(s)/invoice(s), as per GST rules/ regulation, with all required supporting document(s) within a period specified in Contract to enable TFL to avail input credit of GST (CGST & SGST/UTGST or IGST). Further, returns and details required to be filled under GST laws & rules should be timely filed by Bidder with requisite details.

If input Tax credit is not available to TFL for any reason not attributable to TFL, then TFL shall not be obligated or liable to pay or reimburse GST (CGST & SGST/UTGST or IGST) claimed in the invoice(s) and shall be entitled to deduct/ setoff/ recover such GST amount (CGST & SGST/UTGST or IGST) or Input Tax Credit amount together with penalties and interest, if any, against any amounts paid or becomes payable by TFL in future to the Bidder under this contract or under any other contract.

In case CBIC (Central Board of Indirect Taxes and Customs)/ any tax authority/ any equivalent government agency brings to the notice of TFL that the Bidder has not remitted the amount towards GST (CGST & SGST/UTGST or IGST) collected from TFL to the government exchequer, then, that Bidder shall be put under Holiday list of OWNER for period of six months as mentioned in Procedure for Evaluation of

Performance of Vendors/ Suppliers/ PMCs/ Bidders. This action will be in addition to the right of recovery of financial implication arising on TFL.

- 12.9 The amount of statutory levies like, CGST, SGST & IGST will be released when the same will appear in the GSTR-2A of OWNER, in the common portal of GST and Bidder has filed the valid return in accordance with the provisions of the GST act and the rules made thereunder. If, input tax credit is not available to OWNER for any reason attributable to the bidder, then OWNER shall not be obligatory or liable to pay or reimburse GST claimed in invoice and shall be entitled to deduct /setoff/ recover such GST together with all the penalty and interest if any, against any amount paid or payable to bidder. Further in this case, OWNER reserves the right to upload the name of such defaulter on the Company website and may also consider for putting under Holiday list of OWNER for period of six months as mentioned in Procedure for Evaluation of Performance of Vendors/ Suppliers/ PMCs/ Bidders.

**12.10 Anti-profiteering clause**

As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The PMC may note the above and quote their prices accordingly.

- 12.11 In case the GST rating of vendor on the GST portal / Govt. official website is negative / black listed, then the bids may be rejected by TFL. Further, in case rating of bidder is negative / black listed after award of work, then TFL shall not be obligated or liable to pay or reimburse GST to such vendor and shall also be entitled to deduct / recover such GST along with all penalties / interest, if any, incurred by TFL.

- 12.12 The PMC shall mention the particulars of Talcher Fertilizers Limited, (place specified in BDS) on the Invoice. Besides, if any other particulars of Talcher Fertilizers Limited are required to be mentioned, under GST rules/ regulations, the same shall also be mentioned on the Invoice.

- 12.13 GST, as quoted by the bidder, shall be deemed as final and binding for the purpose of bid evaluation (applicable for tenders where bidder quotes the GST rates). In case a bidder enters zero GST or an erroneous GST, the bid evaluation for finalizing the L1 bidder will be done considering the quoted GST rate. No request for change in GST will be entertained after submission of bids. In case GST column is left blank in the SOR, the quoted prices shall be considered as "Inclusive of GST" and evaluation shall be done accordingly.

In cases where the successful bidder quotes a wrong GST rate, for releasing the order, the following methodology will be followed:

- In case the actual GST rate applicable is lower than the quoted GST rate, the actual GST rate will be added to the quoted basic prices. The final cash outflow will be based on actual GST rate.
- In case the actual GST rate applicable is more than the quoted GST rate, the basic prices quoted will be reduced proportionately, keeping the final cash outflow the same as the overall quoted amount.

Based on the Total Cash Outflow calculated as above, TFL shall place orders.

- 12.14 The PMC confirms that it has included all taxes, duties, levies etc., as applicable at prevailing rates, in its SCHEDULE OF RATES. In case, PMC has not included any such taxes, duties, levies etc., at all and/or at prevailing rates and PMC has to pay such taxes, duties, levies etc., OWNER shall not be liable for payment of such

liabilities and/or OWNER shall not reimburse such taxes, duties, levies etc. to PMC.

12.15 Wherever TDS under GST Laws has been deducted from the Tax invoices raised / payments made to the PMC, as per the provisions of the GST law / Rules, Vendors should accept the corresponding GST-TDS amount populated in the relevant screen on GST common portal (www.gst.gov.in). Further, Vendors should also download the GST TDS certificate from GST common portal (reference path: Services>User Services> View/Download Certificates option).

12.16 **New Taxes & duties:** Any new taxes & duties, if imposed by the State/ Central Govt. of India after the due date of bid submission but before the Contractual Completion Date, shall be reimbursed to the PMC on submission of copy of notification(s) issued from State/ Central Govt. Authorities along with documentary evidence for proof of payment of such taxes & duties, but only after ascertaining it's applicability with respect to the Contract.

12.17 **Provision w.r.t. E- Invoicing requirement as per GST laws:** PMC(s) who is required to comply with the requirements of E-invoice for B2B transactions as per the requirement of GST Law will ensure the compliance of requirement of E Invoicing under GST law. If the invoice issued without following this process, such invoice cannot be processed for payment by TFL as no ITC is allowed on such invoices.

Therefore, all the payments to such PMC who is liable to comply with e-invoice as per GST Laws shall be made against the proper e-invoice(s) only. Further, returns and details required to be filled under GST laws & rules against such e-invoices should be timely filed by PMC(s) with requisite details.

If input tax credit is not available to TFL for any reason attributable to PMC (both for E-invoicing cases and non-E-invoicing cases), then TFL shall not be obligated or liable to pay or reimburse GST (CGST & SGST/UTGST or IGST) claimed in the invoice(s) and shall be entitled to deduct / setoff / recover such GST amount (CGST & SGST/UTGST or IGST) or Input Tax Credit amount together with penalties and interest, if any, by adjusting against any amounts paid or becomes payable in future to the PMC under this contract or under any other contract.

To ensure compliance, undertaking in requisite format is to be submitted by PMC as per format enclosed at Form F-10 along with documents for release of payment.

12.18 Deleted

13 **BID CURRENCIES:**

The prices are to be quoted in Indian Rupees only.

14 **BID VALIDITY**

14.1 Bids shall be kept valid for period specified in BDS from the final Due date of submission of bid'. A Bid valid for a shorter period may be rejected by TFL as 'non-responsive'.

14.2 In exceptional circumstances, prior to expiry of the original 'Bid Validity Period', the Employer may request the Bidders to extend the 'Period of Bid Validity' for a specified additional period. The request and the responses thereto shall be made in writing or by fax/email. A Bidder may refuse the request. A Bidder agreeing to the request will not be required or permitted to modify his Bid.

15 **PRE-BID MEETING (IF APPLICABLE)**

- 15.1 The Bidder(s) or his designated representatives are invited to attend a "Pre-Bid Meeting" which will be held through video conferencing only. The bidder shall send the list of representatives (not more than two) with their email IDs (on which meeting link will be sent) who wishes to attend the Pre Bid meeting to PDIL, at least two days before the scheduled Pre-bid meeting.
- 15.2 Purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage and give hands-on e-tendering.
- 15.3 Text of the questions raised and the responses given, together with any responses prepared after the meeting, will be uploaded on e-tendering website against the Tender. Any modification of the Contents of Tender Documents listed in "ITB: Clause-6.1", that may become necessary as a result of the Pre-Bid Meeting shall be made by the Employer exclusively through the issue of an Addendum / Corrigendum pursuant to "ITB: Clause-8", and not through the minutes of the Pre-Bid Meeting.
- 15.4 Non-attendance of the Pre-Bid Meeting will not be a cause for disqualification of Bidder.

16 **FORMAT AND SIGNING OF BID**

- 16.1 The original and all copies of the Bid shall be typed or written in indelible ink [in the case of copies, photocopies are also acceptable] and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder (as per POA). The name and position held by each person signing, must be typed or printed below the signature. All pages of the Bid except for unamended printed literature where entry(s) or amendment(s) have been made shall be initialed by the person or persons signing the Bid.
- 16.2 The Bid shall contain no alterations, omissions, or additions, unless such corrections are initialed by the person or persons signing the Bid.
- 16.3 Digitally signed documents to be uploaded as detailed in addendum to ITB.

16.A **DECLARATION FOR BID SECURITY**

Earnest Money Deposit/Bid Security is not applicable.  
However, all the bidder (including MSMEs & Startups) is required to submit Declaration for Bid Security in bid as per proforma at Form F-9.

17 **ZERO DEVIATION AND REJECTION CRITERIA**

- 17.1 ZERO DEVIATION: Deviation to terms and conditions of "Tender Documents" may lead to rejection of bid.TFL will accept bids based on terms & conditions of "Tender Documents" only. Bidder may note TFL will determine the substantial responsiveness of each bid to the Tender Documents pursuant to provision contained in clause 27 of ITB. For purpose of this, a substantially responsive bid is one which conforms to all terms and conditions of the Tender Documents without deviations or reservations. TFL's determination of a bid's responsiveness is based on the content of the bid itself without recourse to extrinsic evidence. TFL reserves the right to raise technical and/or commercial query(s), if required, may be raised on the bidder(s). The response(s) to the same shall be in writing, and no change in the price(s) or substance of the bids shall be sought, offered or permitted. The substance of the bid includes but not limited

to prices, completion, scope, etc. Bidders are requested to not to take any deviation/exception to the terms and conditions laid down in this "Tender Documents", and submit all requisite documents as mentioned in this "Tender Documents", failing which their offer will be liable for rejection. If a bidder does not reply to the queries in the permitted time frame then its bid shall be evaluated based on the documents available in the bid.

17.2 **REJECTION CRITERIA:** Notwithstanding the above, deviation to the following clauses of Tender document shall lead to summarily rejection of Bid:

- (a) Firm Price
- (b) Scope of Work / Terms of Reference
- (c) Schedule of Rates / Price Schedule / Price Basis
- (d) Duration / Period of Contract/ Completion schedule
- (e) Period of Validity of Bid
- (f) Price Reduction Schedule for delay in completion(if applicable)
- (g) Guarantee / Defect Liability Period (if applicable)
- (h) Arbitration / Resolution of Dispute/Jurisdiction of Court
- (i) Force Majeure & Applicable Laws
- (j) Integrity Pact, if applicable
- (k) Bid Security declaration, as applicable
- (l) Undertaking forms, Form I & II of Annexure VI for provision for procurement from a bidder which shares a land border with India
- (m) Bidder quoting less than 20% as minimum Local content (as per PP-LC policy)
- (a) Any other condition specifically mentioned in the tender document elsewhere that non-compliance of the clause lead to rejection of bid

Note: Further, it is once again reminded not to mention any condition in the Bid which is contradictory to the terms and conditions of Tender document.

## 18 **E-PAYMENT**

OWNER has initiated payments to Suppliers /Contractors/PMCs electronically, and to facilitate the payments electronically through '**e-banking**'. The successful bidder should give the details of his bank account as per the bank mandate form.

## **[D] – SUBMISSION OF BIDS**

### 19 **SUBMISSION, SEALING AND MARKING OF BIDS**

19.1 Bids shall be submitted through e-tender mode on CPP portal (<https://eprocure.gov.in/eprocure/app>) in the manner specified elsewhere in tender document. No Manual/ Hard Copy (Original) offer shall be acceptable.

19.2 All the bids shall be addressed to the owner at address specified in IFB.

19.3 Bids submitted under the name of AGENT/ REPRESENTATIVE / RETAINER/ ASSOCIATE etc. on behalf of a bidder/affiliate shall not be accepted. Direct bid from Bidder shall be considered.

### 20 **DEADLINE FOR SUBMISSION OF BIDS**

20.1 The bids must be submitted through e-tender mode not later than the date and time specified in the tender documents/BDS.

20.2 Deleted

20.3 OWNER may, in exceptional circumstances and at its discretion, extend the deadline for submission of Bids (clause 8 of ITB refers). In which case all rights and obligations of OWNER and the Bidders, previously subject to the original deadline will thereafter be subject to the deadline as extended. Notice for extension of due date of submission of bid will be uploaded on website as mentioned in Clause No. 2.0(F) of IFB / communicated to the bidders.

21 **LATE BIDS**

21.1 **Deleted.**

21.2 CPP Portal (eprocure.gov.in) shall close immediately of after the due date for submission of bid and no bids can be submitted thereafter. Fax/E-mail offers or offers submitted in physical/hard copy whether sent directly or submitted by local agent in India will not be considered and shall be rejected.

21.3 Unsolicited Bids or Bids received to address other than one specifically stipulated in the tender document will not be considered for evaluation/opening/award if not received to the specified destination within stipulated date & time.

22 **MODIFICATION AND WITHDRAWAL OF BIDS**

22.1 The bidder may withdraw or modify its bid after bid submission but before the due date and time for submission as per tender document.

22.2 No bid shall be modified/ withdrawn after the Due Date & Time for Bid submission.

22.3 Any withdrawal/ modification/substitution of Bid in the interval between the Due Date & Time for Bid submission and the expiration of the period of bid validity specified by the Bidder in their Bid shall result in rejection of Bid.

22.4 The latest Bid submitted by the Bidder shall be considered for evaluation and all other Bid(s) shall be considered to be unconditionally withdrawn.

22.5 In case after price bid opening the lowest evaluated bidder (L1) is not awarded the job for any mistake committed by him in bidding or withdrawal of bid or modification of bid or varying any term in regard thereof leading to re-tendering, such bidders shall be debarred from participation in re-tendering of the same job(s)/item(s). Further, such bidder will be put on holiday for a period of six months after following the due procedure.

23 **EMPLOYER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

TFL reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids, at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the ground for TFL's action. However, Bidder if so desire may seek the reason (in writing) for rejection of their Bid to which TFL shall respond quickly.



## **IE] – BID OPENING AND EVALUATION**

### **24 BID OPENING**

#### **24.1 Unpriced Bid Opening:**

Due to COVID-19 situation, TFL/ PDIL will not be able to open Unpriced bid in the presence of bidders" designated representatives. However, bidders can log onto CPP portal at the designated date & time to view the status of bids received.

#### **24.2 Priced Bid Opening:**

24.2.1 TFL will open the price bids of those bidders who meet the qualification requirement and whose bids are determined to be technically and commercially responsive. Bidders selected for opening of their price bids shall be informed about the date of price bid opening. Due to COVID-19 situation, TFL/ PDIL will not be able to open priced bids in the presence of bidders" designated representatives. However, bidders can log onto CPP portal at the designated date & time to view the status of price bids.

24.2.2 The price bids of those Bidders who were not found to be techno-commercially responsive shall not be opened. The Price bids for acceptable bidder shall be opened by PMC/ OWNER.

#### **24.3 Discussions & Availability of Professional staff/experts**

The successful bidder shall be invited for discussions if considered necessary by TFL/PDIL. Discussions will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan, and organization and staffing, and any suggestions made by the PMC to improve the Terms of Reference. TFL/PDIL and PMC will finalize the Terms of Reference, staffing schedule, work schedule, logistics and reporting. These documents will then be incorporated in the Contract as "Description of Services". Having selected the PMC on the basis of tender requirement, an evaluation of proposed Professional staff, TFL/PDIL expects to discuss a Contract on the basis of the Professional staff named in the Proposal. Before Contract discussions, TFL/PDIL will require assurances that the Professional staff will be actually available. TFL/PDIL will not consider substitutions during contract discussions unless both parties agree that undue delay in the selection process makes such substitution unavoidable or such changes are critical to meet the objectives of the assignment. If this is not the case and if it is established that Professional staff were offered in the proposal without confirming their availability, the PMC may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate.

During execution of the assignment, if for unavoidable reasons, the PMC proposes for substitution of key personnel, the same may be allowed by TFL, without any prejudice to the completion period. However, in such a situation also, the key staff proposed for substitution shall have qualifications and experience equal to or better than the key staff earlier working for the assignment.

#### **24.4 Conclusion of the discussions**

Discussions will conclude with a review of the draft Contract. To complete discussion TFL/PDIL and the PMC will initial the agreed Contract.

After completing discussions, TFL/PDIL shall award the Contract to the selected PMC.

If the discussions with the selected successful bidder fail, the employer/owner/TFL

shall cancel the bidding process and re-invite the bids.

25 **CONFIDENTIALITY**

Information relating to the examination, clarification, evaluation and comparison of Bids, and recommendations for the award of a Contract, shall not be disclosed to Bidder(s) or any other persons not officially concerned with such process.

26 **CONTACTING THE EMPLOYER**

26.1 From the time of Bid opening to the time of award of Contract, if any Bidder wishes to contact the Employer on any matter related to the Bid, it should do so in writing. Information relating to the examination, clarification, evaluation & recommendation for award shall not be disclosed.

26.2 Any effort by the Bidder to influence the Employer in the Employer's 'Bid Evaluation', 'Bid Comparison', or 'Contract Award' decisions may result in the rejection of the Bidder's Bid and action shall be initiated as per procedure in this regard.

27 **EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS**

27.1 The Owner's determination of a bid's responsiveness is based on the content of the bid only. Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid:-

- (a) Has been properly signed;
- (b) Is accompanied by the required „Bid Security Declaration“.
- (c) Is substantially responsive to the requirements of the Tender Documents; and
- (d) Provides any clarification and/or substantiation that the Employer may require to determine responsiveness pursuant to "ITB: Clause-27.2"

27.2 A substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Tender Documents without material deviations or reservations or omissions for this purpose employer defines the foregoing terms below:

- a) "Deviation" is departure from the requirement specified in the tender documents.
- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirement in the tender documents.
- c) "Omission" is the failure to submit part or all of the information or documentation required in the tender document.

27.3 A material deviation, reservation or omission is one that,

- a) If accepted would,
  - i) Affect in any substantial way the scope, quality, or performance of the job as specified in tender documents.
  - ii) Limit, in any substantial way, inconsistent with the Tender Document, the Employer's rights or the tenderer's obligations under the proposed Contract.
- b) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

27.4 The employer shall examine all aspects of the bid to confirm that all requirements have been met without any material deviation, reservation or omission.

27.5 If a Bid is not substantially responsive, it may be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal of the material deviation,

reservation or omission.

28 **Deleted**

29 **CONVERSION TO SINGLE CURRENCY FOR COMPARISON OF BIDS**

Not Applicable. All bids submitted must be in the currency specified at clause 13 of ITB.

30 **EVALUATION AND COMPARISON OF BIDS**

The Bids shall be evaluated as per evaluation methodology mentioned in Section-II of Tender Document.

In case a bidder is eligible to seek benefit under Purchase Preference under Public Procurement Policy for MSEs (Micro Small Enterprises) Order 2012 [MSE Policy] as well as Purchase Preference under Public Procurement (Preference to Make in India) [PP-LC], then the bidder should categorically seek benefits against only one of the two policies i.e. either PP-LC and MSE policy in the prescribed format (Form -I of Annexure V). The option once exercised cannot be modified subsequently.

Purchase preference benefits shall be extended to the bidder based on the declared option subject to the bidder meeting the requirements contained in that purchase preference policy.

In case a MSEs bidder opts for purchase preference based on PP-LC, he shall not be entitled to claim purchase preference benefit available to MSE Bidders under PPP-2012.

While for evaluating a particular bid that bidder's option (to avail any one out of two applicable purchase preference policies, i.e., PP-LC or MSE Policy) will be considered, for price matching opportunities and distribution of quantities among bidders, the precedence shall be in the following order:-

- (a) Purchase Preference under Public Procurement Policy for MSEs (Micro Small Enterprises) Order 2012
- (b) Purchase Preference under Public Procurement (Preference to Make in India)

**Example:**

(I) **Non divisible item**

L1 bidder is non MSE, non PP-LC bidder

L2 bidder is PP-LC (within 20%)

L3 bidder is MSE bidder (within 15%)

MSE bidder shall be given preference to match the L-1 price. If bidder matches the L-1 price, order shall be placed on him, otherwise, option for matching the L-1 price shall be given to L-2 bidder (PP-LC).

(II) **Divisible item-Case 1(Not Applicable for this Tender)**

(III) **Divisible item-Case 2(Not Applicable for this Tender)**

(IV) In case L1 bidder is a MSE bidder, the entire work shall be awarded to him without resorting to purchase preference to PP-LC bidders.

(V) In case L1 bidder is a PP-LC bidder, purchase preference shall be resorted to MSE bidder as per PPP 2012 only.

31 **PURCHASE PREFERENCE (Indian bidders only)**

Purchase Preference to Local Content (PP-LC) bidders and Micro and Small Enterprises (MSEs) shall be allowed as per Government instructions in vogue as applicable from time to time.

The policy for providing Purchase Preference (linked with Local content) is enclosed as Annexure-V herewith.

**[F] – AWARD OF CONTRACT**

32 **AWARD**

Subject to "ITB: Clause-27", TFL will award the Contract to the successful Bidder whose Bid has been determined to be substantially responsive and has been determined as the Lowest (L1) evaluated bidder provided that bidder, is determined to be qualified to satisfactorily perform the Contract.

***“TFL intent to place the order/contract directly on the address from where Services are rendered. In case, bidder wants order/ contract at some other address or Services from multiple locations, bidder is required to provide in their bid address on which order is to be placed”.***

33 **NOTIFICATION OF AWARD / FAX OF ACCEPTANCE**

33.1 Prior to the expiry of „Period of Bid Validity“, Notification of Award for acceptance of the Bid will be intimated to the successful Bidder by TFL either by E - mail /Letter or like means defined as the “Fax of Acceptance (FOA)”. The Contract shall enter into force on the date of FOA and the same shall be binding on TFL and successful Bidder (i.e. PMC). The Notification of Award/FOA will constitute the formation of a Contract. The detailed Letter of Acceptance shall be issued thereafter incorporating terms & conditions of Tender Document, Corrigendum, Clarification(s), Bid and agreed variation(s)/acceptable deviation(s), if any. TFL may choose to issue Notification of Award in form of detailed Letter of Acceptance without issuing FOA and in such case the Contract shall enter into force on the date of detailed Letter of Acceptance only.

33.2 Contract period shall commence from the date of "Notification of Award" or as mentioned in the Notification of Award. The "Notification of Award" will constitute the formation of a Contract, until the Contract has been effected pursuant to signing of Contract as per "ITB: Clause-34".

33.3 Order/Contract value is subject to Price Reduction Schedule, if any, as per SCC.

34 **SIGNING OF AGREEMENT**

34.1 TFL will award the Contract to the successful Bidder (PMC), who, within 'fifteen [15] days' of receipt of the same, shall sign and return the acknowledged copy to TFL.

34.2 The successful Bidder/ shall be required to execute an 'Agreement' in the proforma given in this Tender Document on a 'non-judicial stamp paper' of appropriate value [cost of the 'stamp-paper' shall be borne by the successful Bidder (PMC)] and of 'State of India' specified in Bidding Data Sheet (BDS) only, within 'fifteen [15] days' of receipt of the "Fax of Acceptance [FOA]" of the Tender by the successful Bidder(PMC). Failure on the part of the successful Bidder (PMC) to sign the 'Agreement' within the above stipulated period, shall constitute sufficient grounds for Action as per Bid Security declaration.

34.3 The format for signing Contract Agreement in English is attached in this Tender Document.

**35 PROCEDURE FOR ACTION IN CASE CORRUPT/ FRAUDULENT/COLLUSIVE/ COERCIVE PRACTICES**

35.1 Procedure for action in case Corrupt/ Fraudulent/Collusive/Coercive Practices is enclosed at Annexure-I.

**35.2 NON-APPLICABILITY OF ARBITRATION CLAUSE IN CASE OF BANNING OF VENDORS/ SUPPLIERS / CONTRACTORS/BIDDERS/ PMC INDULGED IN FRAUDULENT/ COERCIVE PRACTICES**

Notwithstanding anything contained contrary in GCC and other "CONTRACT DOCUMENTS", in case it is found that the Vendors/ Suppliers / Contractors/Bidders/ PMC indulged in fraudulent/ coercive practices at the time of bidding, during execution of the contract etc., and/or on other grounds as mentioned in TFL's "Procedure for action in case Corrupt/Fraudulent/Collusive/Coercive Practices" (Annexure-I), the contractor/bidder/PMC shall be banned (in terms of aforesaid procedure) from the date of issuance of such order by TFL, to such Vendors/ Suppliers / Contractors/Bidders/ PMCs.

TFL's "Procedure for action in case Corrupt/ Fraudulent/ Collusive/ Coercive Practices" (Annexure-I), the contractor/bidder/PMC shall be banned (in terms of aforesaid procedure) from the date of issuance of such order by TFL, to such Vendors/ Suppliers / Contractors/ Bidders/ PMCs.

The Vendor/ Supplier / Contractor/ Bidder/ PMC understands and agrees that in such cases where Vendor/ Supplier / Contractor/ Bidder/PMC has been banned (in terms of aforesaid procedure) from the date of issuance of such order by TFL, such decision of TFL shall be final and binding on such Vendor/ Supplier / Contractor/ Bidder/PMC and the „Arbitration clause" in the GCC and other "CONTRACT DOCUMENTS" shall not be applicable for any consequential issue /dispute arising in the matter.

**36 PUBLIC PROCUREMENT POLICY FOR MICRO AND SMALL ENTERPRISES (MSEs) [applicable for Indian bidders only]**

36.1 Following provision has been incorporated in tender for MSEs, in line with notification of Government of India, vide Gazette of India No. 503 dated 26.03.2012 proclaiming the Public Procurement Policy on procurement of goods and services from Micro and Small Enterprises (MSEs)

i) Deleted

ii) Deleted

iii) In Tender, participating Micro and Small Enterprises quoting price within price band of L1 + 15% shall also be allowed to supply a portion of requirement by

bringing down their prices to L1 price in a situation where L1 price is from someone other than a micro and small enterprises and such micro and small enterprises shall be allowed to supply upto 25% of the total tendered value. In case of more than one such Micro and Small Enterprises, the supply shall be shared proportionately (to tendered quantity). Further, out of above 25%, 5% (20% of 25%) shall be reserved for MSEs owned by SC/ST entrepreneurs. Further, 3% shall be reserved for MSEs owned by women within above 25% reservation. The respective quota(s) shall be transferred to other MSEs in case of non-availability of MSEs owned by SC/ST entrepreneurs / MSEs owned by Women.

Further, the definition of MSEs owned by Women shall be as per the definition for MSEs owned by SC/ST entrepreneurs.

The quoted prices against various items shall remain valid in case of splitting of quantities of the items above.

As the tendered item is non-splitable or non-dividable (specified in Bid Data Sheet) , MSE quoting lowest price within price band L1 ( other than MSE) + 15% , may be awarded for full/ complete supply of total tendered value subject to matching of L1 price.

### 36.2 The MSEs owned by SC/ST & Women entrepreneurs

#### 36.2.1 The MSEs owned by SC/ST entrepreneurs:

- a) In case of proprietary MSE, Proprietor(s) shall be SC/ST.
- b) In case of partnership MSE, the SC/ST partners shall be holding atleast 51% share in the unit
- c) In case of private Limited Companies, at least 51%share is held by SC/ST. If the MSE is owned by SC/ST entrepreneurs, the bidder shall furnish appropriate documentary evidence in this regard.

#### 36.2.2 The MSEs owned by Women entrepreneurs shall mean:

- a) In case of proprietary MSE, Proprietor(s) shall be Women
- b) In case of partnership MSE, the Women partners shall be holding atleast 51% share in the unit
- c) In case of private Limited Companies, at least 51%share is held by Women. If the MSE is owned by Women entrepreneurs, the bidder shall furnish appropriate documentary evidence in this regard.

### 36.3 In case bidder is a Micro or Small Enterprise under the Micro, Small and Medium Enterprises Development Act, 2006, the bidder shall submit the following:

- ❖ Ministry of MSME vide Gazette notification no. CG-DL-E-26062020-220191 dated 26.06.2020 has notified certain criteria for classifying the enterprises as Micro, Small and Medium Enterprises and specified, form and procedure for filing the memorandum (Udyam Registration) w.e.f. 01.07.2020 (for complete details of policy refer website of Ministry of MSME i.e. <https://msme.gov.in>).
- ❖ Accordingly, Micro and Small Enterprises (MSEs) shall be required to submit Udyam Registration Certificate for availing benefit under Public Procurement Policy for MSEs-2012.

An enterprises registered prior to 30.06.2020 and who are not re-registered with Udyam Registration, shall continue to be valid for a period upto 31.12.2021. Such enterprise shall submit EM Part-II or Udyog Aadhaar Memorandum (UAM) for availing benefits of PPP-2012.

The above documents submitted by the bidder shall be duly certified by the Chartered Accountant (not being an employee or a Director or not having any interest in the bidder's company/firm) and notary public with legible stamp.

If the bidder does not provide the above confirmation or appropriate document or any evidence, then it will be presumed that they do not qualify for any preference admissible in the Public Procurement Policy (PPP) 2012.

Further, MSEs who are availing the benefits of the Public Procurement Policy (PPP) 2012 get themselves registered with MSME Data Bank being operated by NSIC, under SME Division, M/o MSME, in order to create proper data base of MSEs which are making supplies to CPSUs.

- 36.4 If against an order placed by TFL, successful bidder(s) (other than Micro/Small Enterprise) is procuring material/services from their sub-vendor who is a Micro or Small Enterprise registered with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises with prior consent in writing of the purchasing authority/Engineer-in-charge, the details like Name, Registration No., Address, Contact No. details of material & value of procurement made, etc. of such Enterprises shall be furnished by the successful bidder at the time of submission of invoice/Bill.
- 36.5 The benefit of policy is not extended to the traders/dealers/ Distributors/ Stockiest / Whole sellers.
- 36.6 NSIC has initiated a scheme of "Consortia and Tender Marketing Scheme" under which they are assisting the Micro & Small enterprises to market their products and services through tender participation on behalf of the individual unit or through consortia.

Accordingly, if the MSEs or the consortia, on whose behalf the bid is submitted by NSIC, is meeting terms and conditions of tender their bid will be considered for further evaluation.

Further, in such cases a declaration is to be submitted by MSE/ consortia on their letter head (s) that all the terms and conditions of tender document shall be acceptable to them.

- 36.7 Interest Payment on Delayed Payments to MSMEs is payable in line with the Micro, Small and Medium Enterprises Development Act, 2006

### **37 VENDOR PERFORMANCE EVALUATION**

Shall be as stipulated Annexure II to ITB herewith.

### **38 INCOME TAX & CORPORATE TAX**

- 38.1 Income tax deduction shall be made from all payments made to the PMC as per the rules and regulations in force and in accordance with the Income Tax Act prevailing from time to time.

38.2 Corporate Tax liability, if any, shall be to the PMC's account.

38.3 TDS

(i) TDS, wherever applicable, shall be deducted as per applicable act/law/rule.

(ii) **Higher rate of TDS for non-filers of ITR**

As per Section 206AB of Income Tax Act, 1961, in case of any vendor/customer who does not filed their Income Tax Return for both of the two previous years preceding to current year and aggregate amount of TDS is more than or equal to 50,000/- in each of those previous two years (or limit defined by Govt. from time to time), then TDS will be deducted at the higher of following rates:

(I) Twice the rate mentioned in relevant TDS section.

(II) Twice the rate or rates in force

(III) 5%

38.4 **MENTIONING OF PAN NO. IN INVOICE/BILL**

As per CBDT Notification No. 95/2015 dated 30.12.2015, mentioning of PAN no. is mandatory for procurement of goods / services/works/PMC services exceeding Rs. 2 Lacs per transaction or as amended from time to time.

Accordingly, supplier/ contractor/ service provider/ PMC should mention their PAN no. in their invoice/ bill for any transaction exceeding Rs. 2 lakhs. As provided in the notification, in case supplier/ contractor/ service provider/ PMC do not have PAN no., they have to submit declaration in Form 60 along with invoice/ bill for each transaction.

Payment of supplier/ contractor / service provider/ PMC shall be processed only after fulfilment of above requirement.

39 **Deleted**

40 **DISPUTE RESOLUTION MECHANISM**

**1.0 CONCILIATION**

Where invitation for Conciliation has been accepted by the other party, the Parties shall attempt to settle such dispute(s) amicably under Part-III of the Arbitration and Conciliation Act, 1996. It would be only after exhausting the option of Conciliation as an Alternate Dispute Resolution Mechanism that the Parties hereto shall invoke Arbitration Clause. For the purpose of this clause, the option of „Conciliation“ shall be deemed to have been exhausted, even in case of rejection of „Conciliation“ by any of the Parties.

**2.0 ARBITRATION**

All issue(s)/dispute(s) excluding the matters that have been specified as excepted matters and listed at clause no. 2.6 and which cannot be resolved through Conciliation, such issue(s)/dispute(s) shall be referred to arbitration for adjudication by Sole Arbitrator.



The party invoking the Arbitration shall have the option to either opt for Ad-hoc Arbitration as provided at Clause 2.1 below or Institutionalized Arbitration as provided at Clause 2.2 below, the remaining clauses from 2.3 to 2.7 shall apply to both Ad-hoc and Institutional Arbitration:-

- 2.1 On invocation of the Arbitration clause by either party, TFL shall suggest a panel of three independent and distinguished persons (Retd Supreme Court & High Court Judges only) to the other party from the Panel of Arbitrators maintained by „Delhi International Arbitration Centre (DIAC) to select any one among them to act as the Sole Arbitrator. In the event of failure of the other party to select the Sole Arbitrator within 30 days from the receipt of the communication from TFL suggesting the panel of arbitrators, the right of selection of the sole arbitrator by the other party shall stand forfeited and TFL shall appoint the Sole Arbitrator from the suggested panel of three Arbitrators for adjudication of dispute(s). The decision of TFL on the appointment of the sole arbitrator shall be final and binding on the other party. The fees payable to Sole Arbitrator shall be governed by the fee Schedule of „Delhi International Arbitration Centre“.

OR

- 2.2 If a dispute arises out of or in connection with this contract, the party invoking the Arbitration shall submit that dispute to any one of the Arbitral Institutions i.e ICADR/ICA/DIAC/SFCA and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Supreme Court/High Court Judge to be appointed/ nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.
- 2.3 The cost of arbitration proceedings shall be shared equally by the parties.
- 2.4 The Arbitration proceedings shall be in English language and the seat, venue and place of Arbitration shall be New Delhi, India only.
- 2.5 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matter relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at New Delhi.
- 2.6 List of Excepted matters:
- a) Dispute(s)/issue(s) involving claims below Rs 25 lakhs and above Rs 25 crores.
  - b) Dispute(s)/issue(s) relating to indulgence of Contractor/Vendor/Bidder/PMC in corrupt/fraudulent/collusive/coercive practices and/or the same is under investigation by CBI or Vigilance or any other investigating agency or Government.
  - c) Dispute(s)/issue(s) wherein the decision of Engineer-In-Charge/owner/TDL has been made final and binding in terms of the Contract.

2.7 Disputes involving claims below Rs 25 Lakhs and above Rs. 25 crores:- Parties mutually agree that dispute(s)/issue(s) involving claims below Rs 25 Lakhs and above Rs 25 crores shall not be subject matter of Arbitration and are subject to the exclusive jurisdiction of the Court(s) situated at New Delhi.

### 3 GOVERNING LAW AND JURISDICTION:

The Contract shall be governed by and construed in accordance with the laws in force in India. The Parties hereby submit to the exclusive jurisdiction of the Courts situated at New Delhi for adjudication of disputes, injunctive reliefs, actions and proceedings, if any, arising out of this Contract.

#### **41 DISPUTES BETWEEN CPSE'S/GOVERNMENT DEPARTMENT'S/ORGANIZATIONS**

Subject to conciliation as provided above, in the event of any dispute (other than those related to taxation matters) or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs/ Port Trusts) inter se and also between CPSEs and Government Departments /Organizations), such dispute or difference shall be taken up by either party for resolution only through AMRCD as mentioned in OPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018..

Any party aggrieved with the decision of the Committee at the First level (tier) may prefer an appeal before the Cabinet Secretary at the Second level (tier) within 15 days from the date of receipt of decision of the Committee at First level, through it's administrative Ministry/Department, whose decision will be final and binding on all concerned.

The above provisions mentioned at clause no.40 & 41 shall supersede provisions relating to Conciliation, Arbitration, Governing Law & Jurisdiction and Disputes between CPSE's/ Government Department's/ Organizations mentioned in General Conditions of Contract (GCC) and elsewhere in tender document.

**42 PMCTO ENGAGE CONTRACT MANPOWER BELONGING TO SCHEDULED CASTES AND WEAKER SECTIONS OF THE SOCIETY**

While engaging the contractual manpower, PMCs are required to make efforts to provide opportunity of employment to the people belonging to Scheduled Castes and weaker sections of the society also in order to have a fair representation of these sections.

**43 QUARTERLY\_CLOSURE OF THE CONTRACT *[FOR APPLICABILITY OF THIS CLAUSE REFER BDS]***

During execution of contracts/orders, various issues may arise. In order to timely detect and to address the contractual issue (s) during the execution of contracts, TFL has introduced a mechanism of quarterly closure of the contract, under which all the issues related to the contract execution will be monitored on quarterly basis for resolution.

PMC are required to co-operate with EIC for proper implementation of this mechanism for smooth execution of the contract.

**44 Deleted**

**45 Deleted**

**46 CONFLICT OF INTEREST**

46.1 The PMC shall not receive any remuneration in connection with the assignment except as provided in the contract. The PMC and its affiliates shall not engage in consulting or other activities that conflict with the interest of the Employer under the contract.

46.2 TFL policy requires that PMC provide professional, objective, and impartial advice and at all times hold the client's interests paramount, without any consideration for future work, and that in providing advice they avoid conflicts with other assignments and their own corporate interests. PMC shall not be hired for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of being unable to carry out the assignment in the best interest of TFL. Without limitation on the generality of the foregoing, PMC shall not be hired under the circumstances set forth below:

- a. Conflict between consulting activities and procurement of goods, works or services (other than consulting services covered by these Guidelines): A firm that has been engaged by TFL to provide goods, works, or services (other than consulting services covered by these Guidelines) for a project, and each of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services for the Project. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and each of its affiliates, shall be disqualified from subsequently providing goods, works or services (other than consulting services covered by these Guidelines) resulting from or directly related to the firm's consulting services for such preparation or implementation.
- b. Conflict among consulting assignments: Neither PMCs (including their personnel and sub-consultants) nor any of their affiliates shall be hired for any assignment that, by its nature, may be in conflict with another assignment of the PMCs. As an

example, PMCs hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project, and PMCs assisting a client in the privatization of public assets shall neither purchase, nor advise purchasers of, such assets. Similarly, PMCs hired to prepare Terms of Reference (TOR) for an assignment shall not be hired for the assignment in question.

- c. Relationship with Employer's staff: PMCs (including their personnel and sub-consultants) that have a business or family relationship with a member of the Employer's staff (or of the project implementing agency's staff) who are directly or indirectly involved in any part of: (i) the preparation of the TOR of the contract (ii) the selection process for such contract or (iii) supervision of such contract may not be awarded a contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Employer throughout the selection process and the execution of the contract.
- d. A consultant, who prepares Detailed Feasibility Report (DFR) of a Project is not debarred from participating as Project Management Consultant (PMC) for the same Project as both are services in nature.  
If a PMC is engaged for preparation of TOR of an assignment, such PMC shall not be allowed to participate in bidding process of the assignment in question.
- e. A PMC, who has been appointed by TFL to assist in a bidding process where TFL is a bidder, should not be a PMC to any other prospective bidder(s) for the same assignment. Similarly, a PMC appointed by any competitor of TFL in a bidding process shall not be qualified in TFL's tender for the same assignment.

46.3 PMCs have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the PMC or the termination of its Contract.

46.4 No agency or current employees of the Client shall work as PMCs under their own ministries, departments or agencies. Recruiting former government employees of the Client to work for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. When the PMC nominates any government employee as Personnel in their technical proposal, such Personnel must have written certification from their government or employer confirming that they are on leave without pay from their official position and allowed to work full-time outside of their previous official position. Such certification shall be provided to the Client by the PMC as part of his technical proposal.

46.5 **Unfair Advantage:** Fairness and transparency in the selection process require that PMCs or their affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to the assignment in question. To that end, the Employer shall make available to all the short-listed PMCs together with the request for proposals all information that would in that respect give a PMC a competitive advantage.

#### 47 **PROFESSIONAL LIABILITY**

The PMC is expected to carry out its assignment with due diligence and in accordance with prevailing standards of the profession.

PMC must have a certain degree of accountability, on its part, for any advice and/or for any service rendered to TFL, keeping in view norms of ethical business, professionalism and the fact that such advice/service is being rendered for a consideration, as per the terms of the contract/tender.

In case of failure by PMC to above, TFL can initiate action like seeking explanation, issuing warning and any other action as deemed fit as per provisions of contract.

**48 PROVISION REGARDING INVOICE FOR REDUCED VALUE OR CREDIT NOTE TOWARDS PRS [FOR APPLICABILITY REFER BDS]**

As mentioned in GCC, PRS is the reduction in the consideration / contract value for the goods / services covered under this contract. In case of delay in supply/ execution of contract, PMC should raise invoice for reduced value as per Price Reduction Schedule Clause (PRS clause). If PMC has raised the invoice for full value, then PMC should issue Credit Note towards the applicable PRS amount with applicable taxes.

In such cases if PMC fails to submit the invoice with reduced value or does not issue credit note as mentioned above, TFL will release the payment to PMC after giving effect of the PRS clause with corresponding reduction of taxes charged on vendor's invoice, to avoid delay in delivery/collection of material."

In case any financial implication arises on TFL due to issuance of invoice without reduction in price or non-issuance of Credit Note, the same shall be to the account of PMC. TFL shall be entitled to deduct / setoff / recover such GST amount (CGST & SGST/UTGST or IGST) together with penalties and interest, if any, against any amounts paid or becomes payable by TFL in future to the PMC under this contract or under any other contract.

**49 POLICY TO PROVIDE PURCHASE PREFERENCE (LINKED WITH LOCAL CONTENT) (PP-LC)**

The policy for providing purchase preference (linked with Local content) is enclosed as Annexure V to ITB herewith.

**50 PROVISION FOR PROCUREMENT FROM A BIDDER WHICH SHARES A LAND BORDER WITH INDIA.**

The clause regarding provision for procurement from a bidder which shares a land border with India is enclosed as Annexure-VI to ITB herewith.

**51 UNIQUE DOCUMENT IDENTIFICATION NUMBER BY PRACTICING CHARTERED ACCOUNTANTS**

Practicing Chartered Accountants shall generate Unique Document Identification Number (UDIN) for all certificates issued by them as per provisions of Tender Document. However, UDIN may not be required for documents being attested by Chartered Accountants in terms of provisions of Tender Document

**PROCEDURE FOR ACTION IN CASE CORRUPT/FRAUDULENT/COLLUSIVE/COERCIVE PRACTICES**

**A Definitions:**

A.1 "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, anything of value to improperly influence the actions in selection process or in contract execution.

"Corrupt Practice" also includes any omission for misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.

A.2 "Fraudulent Practice" means and include any act or omission committed by a agency or with his connivance or by his agent by misrepresenting/ submitting false documents and/ or false information or concealment of facts or to deceive in order to influence a selection process or during execution of contract/ order.

A.3 "Collusive Practice amongst bidders (prior to or after bid submission)" means a scheme or arrangement designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.

A.4 "Coercive practice" means impairing or harming or threatening to impair or harm directly or indirectly, any agency or its property to influence the improperly actions of an agency, obstruction of any investigation or auditing of a procurement process.

A.5 "Vendor/Supplier/Contractor/PMC/Bidder" is herein after referred as "Agency"

A.6 "Appellate Authority" shall mean Committee of Directors consisting of Director (Finance) and Director (BD) for works centers under Director (Projects). For all other cases committee of Directors shall consist of Director (Finance) & Director (Projects).

A.7 "Competent Authority" shall mean the authority, who is competent to take final decision for Suspension of business dealing with an Agency/ (ies) and Banning of business dealings with Agency/ (ies) and shall be the "Director" concerned.

A.8 "Allied Agency" shall mean all the concerns within the sphere of effective influence of banned/ suspended agencies. In determining this, the following factors may be taken into consideration:

- (a) Whether the management is common;
- (b) Majority interest in the management is held by the partners or directors of banned/ suspended firm.
- (c) substantial or majority shares are owned by banned/ suspended agency and by virtue of this it has a controlling voice.

A.9 "Investigating Agency" shall mean any department or unit of TFL investigating into the conduct of Agency/ party and shall include the Vigilance Department of the TFL, Central Bureau of Investigation, State Police or any other agency set up by the Central or state government having power to investigate.

**B Actions against bidder(s) indulging in corrupt /fraudulent/ collusive/ coercive practice**

**B.1 Irregularities noticed during the evaluation of the bids :**

If it is observed during bidding process/ bids evaluation stage that a bidder has indulged in corrupt/fraudulent /collusive/coercive practice, the bid of such Bidder (s) shall be rejected and its Earnest Money Deposit (EMD) shall be forfeited.

Further, such agency shall be banned for future business with TFL for a period specified in para B 2.2 below from the date of issue of banning order.

## **B.2 Irregularities noticed after award of contract**

### **(i) During execution of contract:**

If an agency, is found to have indulged in corrupt/fraudulent/ collusive /coercive practices, action shall be initiated for putting the agency on banning list.

After conclusion of process and issuance of Speaking order for putting party on banning list the order (s)/ contract (s) where it is concluded that such irregularities have been committed shall be terminated and Contract cum Performance Bank Guarantee (CPBG) submitted by agency against such order (s)/ contract (s) shall also be forfeited. Further such order/ contract will be closed following the due procedure in this regard.

The amount that may have become due to the PMC on account of work already executed by him shall be payable to the PMC and this amount shall be subject to adjustment against any amounts due from the PMC under the terms of the contract. No risk and cost provision will be enforced in such cases.

### **Suspension of order/ contract:**

Further, only in the following situations, the concerned order (s)/ contract(s) (where Corrupt/Fraudulent/ Collusive/ Coercive Practices are observed) and payment shall be suspended after issuance of Suspension cum Show Cause Notice:

- (i) Head of Corporate Vigilance Department/CVO based on the investigation by them, recommend for specific immediate action against the agency.
- (ii) Head of Corporate Vigilance Department/CVO based on the input from investigating agency, forward for specific immediate action against the agency.

Suspension cum Show Cause Notice being issued in above cases after approval of the competent authority (as per provisions mentioned under Clause no. D) shall also include the provision for suspension of Order (s)/ Contract (s) and payment. Accordingly, after issuance of Suspension cum Show Cause Notice by Corporate C&P Department, the formal communication for suspension of Order (s)/ Contract (s) and payment with immediate effect will be issued by the following with copy to concerned person of TFL.

During suspension, Contractor/ Service Providers/PMCs will be allowed to visit the plant/ site for upkeep of their items/ equipment, TFL's issued materials (in case custody of same is not taken over), demobilizing the site on confirmation of EIC, etc.

### **(ii) After execution of contract and during Defect liability period (DLP)/ Warranty/Guarantee Period:**

If an agency is found to have indulged in corrupt/fraudulent/ collusive/coercive practices, after execution of contract and during DLP/ Warranty/Guarantee Period, the agency shall be banned for future business with TFL for a period specified in para B 2.2 below from the date of issue of banning order.

Further, the Contract cum Performance Bank Guarantee (CPBG)/Contract Performance Security (CPS) submitted by agency against such order (s)/ contract (s) shall be forfeited.

**(iii) After expiry of Defect liability period (DLP)/ Warranty/Guarantee Period**

If an agency is found to have indulged in corrupt/fraudulent/ collusive/coercive practices, after expiry of Defect liability period (DLP)/ Warranty/Guarantee Period, the agency shall be banned for future business with TFL for a period specified in para B 2.2 below from the date of issue of banning order.

**B.2.2 Period of Banning**

The period of banning of agencies indulged in Corrupt/ Fraudulent/ Collusive/Coercive Practices shall be as under and to be reckoned from the date of banning order:

S. No.	Description	Period of banning from the date of issuance of Banning order
1	<p>Misrepresentation/False information other than pertaining to BEC of tender but having impact on the selection process.</p> <p>For example, if an agency confirms not being in holiday in TFL/PSU's PMC or banned by PSUs/ Govt. Dept., liquidation, bankruptcy &amp; etc. and subsequently it is found otherwise, such acts shall be considered in this category.</p>	02 years
2  2.1	<p>Corrupt/Fraudulent (except mentioned sl. no. 1 above) / Collusive / Coercive Practices</p> <p>If an agency again commits Corrupt/Fraudulent (except mentioned sl. no. 1 above) /Collusive/ Coercive Practices in subsequent cases after their banning, such situation of repeated offense to be dealt with more severity and following shall be the period of banning:</p> <p>(i) Repeated once</p> <p>(ii) Repeated twice or more</p>	<p>03 years</p> <p>7 years (in addition to the period already served)</p> <p>15 years (in addition to the period already served)</p>



3	Indulged in unauthorized disposal of materials provided by TFL	7 years
4	If act of vendor/ PMC is a threat to the National Security	15 years

**C Effect of banning on other ongoing contracts/ tenders**

- C.1 If an agency is put on Banning, such agency should not be considered in ongoing tenders/future tenders.
- C.2 However, if such an agency is already executing other order (s)/ contract (s) where no corrupt/fraudulent/ collusive/coercive practice is found, the agency should be allowed to continue till its completion without any further increase in scope except those incidental to original scope mentioned in the contract.
- C.3 If an agency is put on the Banning List during tendering and no irregularity is found in the case under process:
- C.3.1 after issue of the enquiry /bid/tender but before opening of Technical bid, the bid submitted by the agency shall be ignored.
- C.3.2 after opening Technical bid but before opening the Price bid, the Price bid of the agency shall not be opened and BG/EMD submitted by the agency shall be returned to the agency.
- C.3.3 after opening of price, BG/EMD made by the agency shall be returned; the offer of the agency shall be ignored & will not be further evaluated. If the agency is put on banning list for fraud/ mis-appropriation of facts committed in the same tender/other tender where errant agency emerges as the lowest (L1), then such tender shall also be cancelled and re-invited.

**D. Procedure for Suspension of Bidder**

**D.1 Initiation of Suspension**

Action for suspension business dealing with any agency/(ies) shall be initiated by Corporate C&P Department when

- (i) Corporate Vigilance Department based on the fact of the case gathered during investigation by them recommend for specific immediate action against the agency.
- (ii) Corporate Vigilance Department based on the input from Investigating agency, forward for specific immediate action against the agency.
- (iii) Non performance of Vendor/Supplier/Contractor/PMC leading to termination of Contract/ Order.

**D.2 Suspension Procedure:**

- D.2.1 The order of suspension would operate initially for a period not more than six months and is to be communicated to the agency and also to Corporate Vigilance Department. Period of suspension can be extended with the approval of the Competent Authority by one month at a time with a ceiling of six months pending a conclusive decision to put the agency on banning list.

- D.2.2 During the period of suspension, no new business dealing may be held with the agency.
- D.2.3 Period of suspension shall be accounted for in the final order passed for banning of business with the agency.
- D.2.4 The decision regarding suspension of business dealings should also be communicated to the agency.
- D.2.5 If a prima-facie, case is made out that the agency is guilty on the grounds which can result in banning of business dealings, proposal for issuance of suspension order and show cause notice shall be put up to the Competent Authority. The suspension order and show cause notice must include that (i) the agency is put on suspension list and (ii) why action should not be taken for banning the agency for future business from TFL.

The competent authority to approve the suspension will be same as that for according approval for banning.

### **D 3 Effect of Suspension of business:**

Effect of suspension on other on-going/future tenders will be as under:

- D.3.1 No enquiry/bid/tender shall be entertained from an agency as long as the name of agency appears in the Suspension List.
- D.3.2 If an agency is put on the Suspension List during tendering:
  - D.3.2.1 after issue of the enquiry /bid/tender but before opening of Technical bid, the bid submitted by the agency shall be ignored.
  - D.3.2.2 after opening Technical bid but before opening the Price bid, the Price bid of the agency shall not be opened and BG/EMD submitted by the agency shall be returned to the agency.
  - D.3.2.3 after opening of price, BG/EMD made by the agency shall be returned; the offer of the agency shall be ignored & will not be further evaluated. If the agency is put on Suspension list for fraud/ mis-appropriation of facts conducted in the same tender/other tender where errant agency emerges as the lowest (L1), then such tender shall also be cancelled and re-invited.
- D.3.3 The existing contract (s)/ order (s) under execution shall continue.
- D.3.4 Tenders invited for procurement of goods, works and services shall have provision that the bidder shall submit a undertaking to the effect that (i) neither the bidder themselves nor their allied agency/(ies) are on banning list of TFL and (ii) bidder is not banned by any Government department/ Public Sector.

### **F. Appeal against the Decision of the Competent Authority:**

- F.1 The agency may file an appeal against the order of the Competent Authority for putting the agency on banning list. The appeal shall be filed to Appellate Authority. Such an appeal shall be preferred within one month from the receipt of banning order.
- F.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the party as well as the Competent Authority.

- F.3 Appeal process may be completed within 45 days of filing of appeal with the Appellate Authority.
- G. Wherever there is contradiction with respect to terms of „Integrity pact“ , GCC and „Procedure for action in case of Corrupt/Fraudulent/ Collusive/Coercive Practice“, the provisions of „Procedure for action in case of Corrupt/Fraudulent/ Collusive/Coercive Practice“ shall prevail.

**PROCEDURE FOR EVALUATION OF PERFORMANCE OF VENDORS/ SUPPLIERS/  
CONTRACTORS/ PMCs**

**1.0 GENERAL**

A system for evaluation of Vendors/ Suppliers/Contractors/ PMCs and their performance is a key process and important to support an effective purchasing & contracting function of an organization.

Performance of all participating Vendors/ Suppliers/Contractors/ PMCs need to be closely monitored to ensure timely receipt of supplies from a Vendor, completion of an assignment by a PMC or complete execution of order by a contractor within scheduled completion period. For timely execution of projects and meeting the operation & maintenance requirement of operating plants, it is necessary to monitor the execution of order or contracts right from the award stage to completion stage and take corrective measures in time.

**2.0 OBJECTIVE**

The objective of Evaluation of Performance aims to recognize, and develop reliable Vendors/ Suppliers/Contractors/PMCs so that they consistently meet or exceed expectations and requirements.

The purpose of this procedure is to put in place a system to monitor performance of Vendors/ Suppliers/Contractors/ PMCs associated with TFL in Projects and in O&M so as to ensure timely completion of various projects, timely receipt of supplies including completion of works & services for operation and maintenance of operating plants and quality standards in all respects.

**3.0 METHODOLOGY**

i) Preparation of Performance Rating Data Sheet

Performance rating data Sheet for each and every Vendor/ Supplier/Contractor/PMC for all orders/Contracts with a value of Rs. 50 Lakhs and above is recommended to be drawn up. Further, Performance rating data Sheet for orders/contracts of Vendor/Supplier/Contractor/ PMC who are on watch list/holiday list/ banning list shall be prepared irrespective of order/ contract value. These data sheets are to be separately prepared for orders/ contracts related to Projects and O&M. Format, Parameters, Process, responsibility for preparation of Performance Rating Data Sheet are separately mentioned.

ii) Measurement of Performance

Based on the parameters defined in Data Sheet, Performance of concerned Vendor/ Supplier/Contractor/ PMC would be computed and graded accordingly. The measurement of the performance of the Party would be its ability to achieve the minimum scoring of 60% points in the given parameters.

iii) Initiation of Measures:

Depending upon the Grading of Performance, corrective measures would be initiated by taking up the matter with concerned Vendor/ Supplier/Contractor/

PMC. Response of Vendor/ Supplier/Contractor/ PMC would be considered before deciding further course of action.

iv) Implementation of Corrective Measures:

Based on the response of Vendor/ Supplier/Contractor/ PMC, concerned Engineer-in-Charge for the Projects and/or OIC in case of O&M would recommend for continuation or discontinuation of such party from the business of TFL.

v) Orders/contracts placed on Proprietary/OEM basis for O&M will be evaluated and, if required, corrective action will be taken for improvement in future.

**4.0 EXCLUSIONS:**

The following would be excluded from the scope of evaluation of performance of Vendors/ Suppliers/Contractors/ PMCs:

- i) Orders/Contracts below the value of Rs. 50 Lakhs if Vendor/ Supplier/Contractor/ PMC is not on watch list/ holiday list/ banning list.
- ii) Orders for Misc./Administrative items/ Non stock Non valued items (PO with material code ending with 9).

However, concerned Engineer-in-Charge /OICs will continue to monitor such cases so as to minimize the impact on Projects/O&M plants due to non performance of Vendors/ Suppliers/Contractors/ PMC in all such cases.

**5.0 PROCESS OF EVALUATION OF PERFORMANCE OF VENDORS/ SUPPLIERS/ CONTRACTORS/ PMCS**

**5.1 FOR PROJECTS**

- i) Evaluation of performance of Vendors/ Suppliers/Contractors/ PMCs in case of PROJECTS shall be done immediately with commissioning of any Project.
- ii) On commissioning of any Project, EIC (Engineer-in-charge)/ Project-in-charge shall prepare a Performance Rating Data Sheet (Format at Annexure-1) for all Orders and Contracts.
- iii) Depending upon the Performance Rating, following action need to be initiated by Engineer-in-charge/Project-in-charge:

Sl.No.	Performance Rating	Action
1	POOR	Seek explanation for Poor performance
2	FAIR	Seek explanation for Fair performance
3	GOOD	Letter to the concerned for improving performance in future
4	VERY GOOD	No further action

iv) Reply from concerned Vendor/ Supplier/Contractor/ PMC shall be examined. In case of satisfactory reply, Performance Rating data Sheet to be closed with a letter to the concerned for improving performance in future.

v) When no reply is received or reasons indicated are unsatisfactory, the following actions need to be taken:

A) Where performance rating is "POOR" (as per Performance Rating carried out after execution of Order/ Contract and where no reply/unsatisfactory reply is received from party against the letter seeking the explanation from Vendor/Supplier/Contractor/ PMC along with sharing the performance rating)

Recommend such defaulting Vendor/Supplier/Contractor/ PMC for the following action:

(a) **First such instance: Advisory notice (Yellow Card)** shall be issued and Vendor/Supplier/Contractor/ PMC shall be put on watch list for a period of Three (3) Years. Such vendor will be allowed to participate in all other tenders and to execute other ongoing order/ contract (s) or new contract/ order (s).

The Yellow card will be automatically revoked after a period of three years unless the same is converted into Red Card due to subsequence instances of poor/ non-performance in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC.

(b) **Second such instance in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC**

(i) Poor Performance due to reasons other than Quality: **Putting on Holiday for a period of One Year**

(ii) Poor Performance on account of Quality (if any mark obtained against Quality parameter is less than 30): **Putting on Holiday for a period of Two Years**

(c) Subsequent instances (**more than two**) in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC: **Putting on Holiday for a period of Three Years**

B) Where Poor/Non-Performance leading to termination of contract or Offloading of contract due to poor performance attributable to Vendor/Supplier/ Contractor/PMC (under Clause no.3.16.1 of GCC-Consultancy)

- (a) **First instance: Advisory notice (Yellow Card)** shall be issued and Vendor/Supplier/Contractor /PMC shall be put on watch list for a period of Three (3) Years.  
Further such vendor will not be allowed to participate in the re-tender of the same supply/work/services of that location which has terminated / offloaded. Moreover, it will be ensured that all other action as per provision of contract including forfeiture of Contract Performance Security (CPS) etc. are undertaken.  
However, such vendor will be allowed to participate in all other tenders and to execute other ongoing order/ contract (s) or new contract/ order (s).  
The Yellow card will be automatically revoked after a period of three years unless the same is converted into Red Card due to subsequent instances of poor/ non-performance in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC.
- (b) **Second instances** in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC: **Holiday (Red Card)** for period of One Year and they shall also to be considered for Suspension.
- (c) **Subsequent instances (more than two)** in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC: **Holiday (Red Card) for period of Three Years and they shall also to be considered for Suspension.**

- (C) Where Performance rating is "FAIR":  
Issuance of warning to such defaulting Vendor/ Supplier/Contractor/ PMC to improve their performance.

## 5.2 FOR CONSULTANCY JOBS

Monitoring and Evaluation of consultancy jobs will be carried out in the same way as described in para 3.1 for Projects.

## 5.3 FOR OPERATION & MAINTENANCE

- i) Evaluation of performance of Vendors/ Suppliers/Contractors/ PMCs in case of Operation and Maintenance shall be done immediately after execution of order/ contract.
- ii) After execution of orders a Performance Rating Data Sheet (Format at Annexure-2) shall be prepared for Orders by Site C&P and for Contracts/Services by respective Engineer-In-Charge.
- iii) Depending upon Performance Rating, following action need to be initiated by Site C&P:

Sl. No.	Performance Rating	Action
1	<b>POOR</b>	Seek explanation for Poor performance
2.	<b>FAIR</b>	Seek explanation for Fair performance
3	<b>GOOD</b>	Letter to the concerned for improving performance in future.
4	<b>VERY GOOD</b>	No further action

- iv) Reply from concerned Vendor/ Supplier/Contractor/ PMC shall be examined. In case of satisfactory reply, Performance Rating data Sheet to be closed with a letter to the concerned for improving performance in future.
- v) When no reply is received or reasons indicated are unsatisfactory, the following actions need to be taken:

A) Where performance rating is "POOR" (as per Performance Rating carried out after execution of Order/ Contract and where no reply/ unsatisfactory reply is received from party against the letter seeking the explanation from Vendor/Supplier/Contractor/ PMC along with sharing the performance rating)

Recommend such defaulting Vendor/Supplier/Contractor/ PMC for the following action:

- (b) **First such instance: Advisory notice (Yellow Card)** shall be issued and Vendor/Supplier/Contractor/ PMC shall be put on watch list for a period of Three (3) Years.  
Such vendor will be allowed to participate in all other tenders and to execute other ongoing order/ contract (s) or new contract/ order (s).

The Yellow card will be automatically revoked after a period of three years unless the same is converted into Red Card due to subsequence instances of poor/ non-performance in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC.

(b) **Second such instance in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC**

- (i) Poor Performance due to reasons other than Quality: **Putting on Holiday for a period of One Year**
- (ii) Poor Performance on account of Quality (if any mark obtained against Quality parameter is less than 30): **Putting on Holiday for a period of Two Years**

(c) Subsequent instances (**more than two**) in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC: **Putting on Holiday for a period of Three Years**

B) Where Poor/Non-Performance leading to termination of contract or Offloading of contract due to poor performance attributable to Vendor/Supplier/ Contractor/PMC (under Clause no.3.16.1 of GCC-Consultancy)

- (d) **First instance: Advisory notice (Yellow Card)** shall be issued and Vendor/Supplier/Contractor /PMC shall be put on watch list for a period of Three (3) Years.  
Further such vendor will not be allowed to participate in the re-tender of the same supply/work/services of that location which has terminated / offloaded. Moreover, it will be ensured that all



other action as per provision of contract including forfeiture of Contract Performance Security (CPS) etc. are undertaken. However, such vendor will be allowed to participate in all other tenders and to execute other ongoing order/ contract (s) or new contract/ order (s).

The Yellow card will be automatically revoked after a period of three years unless the same is converted into Red Card due to subsequent instances of poor/ non-performance in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC.

(e) **Second instances** in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC: **Holiday (Red Card)** for period of One Year and they shall also to be considered for Suspension.

(f) **Subsequent instances (more than two)** in other ongoing order (s)/ contract (s) or new order (s) /contact (s) on such Vendor/ Supplier/ Contractor/ PMC: **Holiday (Red Card) for period of Three Years and they shall also to be considered for Suspension.**

(C) Where Performance rating is "FAIR":  
Issuance of warning to such defaulting Vendor/ Supplier/Contractor/ PMC to improve their performance.

## 6.0 **REVIEW & RESTORATION OF PARITES PUT ON HOLIDAY**

6.1 An order for Holiday passed for a certain specified period shall deemed to have been automatically revoked on the expiry of that specified period and it will not be necessary to issue a specific formal order of revocation.

Further, in case Vendor/ Supplier/Contractor/ PMC is put on holiday due to quality, and new order is placed on bidder after restoration of Vendor/ Supplier/Contractor/ PMC, such order will be properly monitored during execution stage by the concerned site.

## 7.0 **EFFECT OF HOLIDAY**

7.1 If a Vendor/ Supplier/Contractor/ PMC is put on Holiday, such Vendor/ Supplier/Contractor/ PMC should not be considered in ongoing tenders/future tenders.

7.2 However, if such Vendor/ Supplier/Contractor/ PMC is already executing any other order/ contract and their performance is satisfactory in terms of the relevant contract, should be allowed to continue till its completion without any further increase in scope except those incidental to original scope mentioned in the contract. In such a case CPBG will not be forfeited and payment will be made as per provisions of concerned contract. However, this would be without prejudice to other terms and conditions of the contract.

7.3 Effect on other ongoing tendering:

7.3.1 after issue of the enquiry /bid/tender but before opening of Technical bid, the bid submitted by the party shall be ignored.

7.3.2 after opening Technical bid but before opening the Price bid, the Price bid of the party shall not be opened and BG/EMD submitted by the party shall be returned to the party.

7.3.3 after opening of price, BG/EMD made by the party shall be returned; the offer of the party shall be ignored & will not be further evaluated. If errant party emerges as the lowest (L1), then such tender shall also be cancelled and re-invited.

8.0 While putting the Vendor/ Supplier/Contractor/ PMC on holiday as per the procedure, the holding company, subsidiary, joint venture, sister concerns, group division of the errant Vendor/ Supplier/Contractor/ PMC shall not be considered for putting on holiday list.

Any bidder, put on holiday, will not be allowed to bid through consortium route also in new tender during the period of holiday.

9.0 If an unsuccessful bidder makes any vexatious, frivolous or malicious complaint against the tender process with the intention of delaying or defeating any procurement or causing loss to TFL or any other bidder, such bidder will be put on holiday for a period of six months, if such complaint is proved to be vexatious, frivolous or malicious, after following the due procedure.

#### **10.0 APPEAL AGAINST THE DECISION OF THE COMPETENT AUTHORITY:**

(a) The party may file an appeal against the order of the Competent Authority for putting the party on Holiday list. The appeal shall be filed to Appellate Authority. Such an appeal shall be preferred within one month from the receipt of Holiday order.

(b) Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the party as well as the Competent Authority.

(c) Appeal process may be completed within 45 days of filing of appeal with the Appellate Authority.

(d) "Appellate Authority" shall mean Committee of Directors consisting of Director (Finance) and Director (BD) for works centers under Director (Projects). For all other cases committee of Directors shall consist of Director (Finance) & Director (Projects).

#### **11.0 ERRANT BIDDER**

In case after price bid opening the lowest (L1) is not awarded the job for any mistake committed by him in bidding or withdrawal of bid or modification of bid or varying any term in regard thereof leading to re-tendering, TFL shall forfeit EMD paid by the bidder and such bidders shall be debarred from participation in re-tendering of the same job(s)/item(s).

Further, such bidder will be put on holiday for a period of six months after following the due procedure.

12.0 In case CBIC (Central Board of Indirect Taxes and Customs)/ any tax authority / any equivalent government agency brings to the notice of TFL/PDIL that the PMC has not remitted the amount towards GST (CGST & SGST/UTGST or IGST) collected from TFL to the government exchequer, then, that Contactor shall be put under Holiday list of TFL for period of six months after following the due procedure. This action will be in addition to the right of recovery of financial implication arising on TFL.

**TALCHER FERTILIZERS LIMITED  
PERFORMANCE RATING DATA SHEET  
(FOR PROJECTS/ CONSULTANCY JOBS)**

- i) Project/Work Centre :
- ii) Order/ Contract No. & date :
- iii) Brief description of Items Works/Assignment :
- iv) Order/Contract value (Rs.) :
- v) Name of Vendor/Supplier/ Contractor/ PMC :
- vi) Contracted delivery/ Completion Schedule :
- vii) Actual delivery/ Completion date :

Performance Parameter	Delivery/ Completion Performance	Quality Performance	Reliability Performance#	Total
Maximum Marks	40	40	20	100
Marks Allocated				

Note:

Remarks (if any)

PERFORMANCE RATING (\*\*)

Note :

(#) Vendor/Supplier/Contractor/PMC who seek repeated financial assistance or deviation beyond contract payment term or seeking direct payment to the sub-vendor/sub-contractor due to financial constraints, then „0“ marks should be allotted against Reliability Performance.

(\*) Allocation of marks should be as per enclosed instructions

(\*\*) Performance rating shall be classified as under :

Sl. No.	Range (Marks)	Rating	Signature of Authorised Signatory:
1	60 & below	POOR	Name:  Designation:
2	61-75	FAIR	
3	76-90	GOOD	
4	More than 90	VERY GOOD	

Signature of Authorised Signatory:

Name:

Designation:

### Instructions for allocation of marks

1. Marks are to be allocated as under :

**1.1 DELIVERY/ COMPLETION PERFORMANCE 40 Marks**

Delivery Period/ Completion Schedule	Delay in Weeks	Marks
a) Upto 3 months	Before CDD	40
	Delay upto 4 weeks	35
	"    8 weeks	30
	"   10 weeks	25
	"   12 weeks	20
	"   16 weeks	15
	More than 16 weeks	0
b) Above 3 months	Before CDD	40
	Delay upto 4 weeks	35
	"    8 weeks	30
	"   10 weeks	25
	"   16 weeks	20
	"   20 weeks	15
	"   24 weeks	10
More than 24 weeks	0	

**1.2 QUALITY PERFORMANCE 40 Marks**

For Normal Cases : No Defects/ No Deviation/ No failure: 40 marks

i) Rejection/Defects 10 marks  
 Marks to be allocated on prorata basis for acceptable quantity as compared to total quantity for normal cases

ii) When quality failure endanger system integration and safety of the system

Failure of severe nature	0 marks
- Moderate nature	5 marks
- low severe nature	10-25 marks

marks	iii) Number of	1. No deviation	5
marks	deviations	2. No. of deviations $\leq$ 2	2
marks		3. No. of deviations > 2	0

**1.3 RELIABILITY PERFORMANCE****20 Marks**

<b>A.</b>	<b>FOR WORKS/CONTRACTS</b>	
i)	Submission of order acceptance, agreement, PBG, Drawings and other documents within time	4 marks
ii)	Mobilization of resources as per Contract and in time	4 marks
iii)	Liquidation of Check-list points	4 marks
iv)	Compliance to statutory and HS&E requirements or Reliability of Estimates/Design/Drawing etc. in case of Consultancy jobs	4 marks
v)	Timely submission of estimates and other documents for Extra, Substituted & AHR items	4 marks
<b>B.</b>	<b>FOR SUPPLIES</b>	
i)	Submission of order acceptance, PBG, Drawings and other documents within time	5 marks
ii)	Attending complaints and requests for after sales service/ warranty repairs and/ or query/ advice (upto the evaluation period).	5 marks
iii)	Response to various correspondence and conformance to standards like ISO	5 marks
iv)	Submission of all required documents including Test Certificates at the time of supply	5 marks

**ADDENDUM TO INSTRUCTIONS TO BIDDERS**

**(INSTRUCTIONS FOR PARTICIPATION IN E-TENDER)**  
**INSTRUCTIONS FOR SUBMISSION OF BID ONLINE THROUGH CPP PORTAL**

1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.
2. **REGISTRATION**
  - i. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
  - ii. As part of the enrollment process, the bidders will be required to choose a unique username and assign a password for their accounts.
  - iii. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
  - iv. Bidders are advised to make ensure the accessibility & availability of java software in their system (PC) either download & install the latest version of java software or click on the below link to install the java in their system prior to proceed further.  
<https://www.oracle.com/technetwork/java/javase/downloads/index.html>
  - v. Upon enrollment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
  - vi. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
  - vii. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
3. **SEARCHING FOR TENDER DOCUMENTS**
  - i. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.

- ii. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective „My Tenders“ folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
- iii. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### 4. PREPARATION OF BIDS

- i. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- ii. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- iii. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- iv. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or „Other Important Documents“ area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

#### 5. SUBMISSION OF BIDS

- i. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii. Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

- iv. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard SOR format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the SOR file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the SOR file is found to be modified by the bidder, the bid will be rejected.
- v. The server time (which is displayed on the bidders" dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- vi. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener"s public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- vii. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- viii. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- ix. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### 6. ASSISTANCE TO BIDDERS

- i. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- ii. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

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**BIDDING DATA SHEET (BDS)****ITB TO BE READ IN CONJUNCTION WITH THE FOLLOWING:**

<b>A. GENERAL</b>	
<b>ITB clause</b>	<b>Description</b>
<b>1.1</b>	The Employer/Owner/Client is: TALCHER FERTILIZERS LIMITED(TFL)
<b>B. TENDER DOCUMENT</b>	
<b>ITB clause</b>	<b>Description</b>
<b>7.1</b>	For <b><u>clarification purposes</u></b> only, the communication address is: M/s Projects & Development India Limited, P.D.I.L Bhawan, A-14, Sector-1, Noida, (PIN 201301) Dist. GautamBudh Nagar (UP). (India)  Kind Attention: Mr. P.R.Sahu, Addl. General Manager (M.M) Fax no. : +91-120-2529801 Tel no. : +91-120-2544063  E-mail : prsahu@pdilin.com anjali@pdilin.com alam@pdilin.com
<b>C. PREPARATION OF BIDS</b>	
<b>ITB clause</b>	<b>Description</b>
<b>10.2 .1 (s)</b>	Additional documents to be submitted by the Bidder with its Part-I (Techno-commercial/ Unpriced bid) : as per SCC/Scope of Work.
<b>11</b>	Additional Provision for Schedule of Rate/ Bid Price are as detailed in 11 of ITB
<b>14</b>	The bid validity period shall be 6 (Six) Months from final 'Bid Due Date'.
<b>D. SUBMISSION AND OPENING OF BIDS</b>	
<b>ITB clause</b>	<b>Description</b>
<b>16</b>	Not applicable.
<b>19.3 and 4.0 of IFB</b>	For submission of physical document as per clause no. 4.0 of IFB, the Owner's address is : Attention: Mr. P.R. Sahu, Addl. General Manager (M.M) M/s Projects & Development India Limited, P.D.I.L Bhawan, A-14, Sector-1, Noida, (PIN 201301) Dist. GautamBudh Nagar (UP). (India)
<b>24</b>	<b>The bid opening shall take place at:</b> M/s Projects & Development India Limited, P.D.I.L Bhawan, A-14, Sector-1, Noida, (PIN 201301) Dist. GautamBudh Nagar (UP). (India)
<b>F. AWARD OF CONTRACT</b>	

ITB clause	Description				
34	State of which stamp paper is required for Contract Agreement: <b>Uttar Pradesh (U.P.) / State where Bidder's Corporate or Registered Office is located</b>				
36	Whether tendered item is non-split able or not-divisible : <table border="1" data-bbox="448 367 1110 510"> <tr> <td data-bbox="448 367 783 434">YES</td> <td data-bbox="783 367 1110 434">✓</td> </tr> <tr> <td data-bbox="448 434 783 510">NO</td> <td data-bbox="783 434 1110 510">x</td> </tr> </table>	YES	✓	NO	x
YES	✓				
NO	x				
44	Quarterly Closure of Contract <table border="1" data-bbox="448 568 1110 696"> <tr> <td data-bbox="448 568 783 624">APPLICABLE</td> <td data-bbox="783 568 1110 624">x</td> </tr> <tr> <td data-bbox="448 624 783 696">NOT APPLICABLE</td> <td data-bbox="783 624 1110 696">✓</td> </tr> </table>	APPLICABLE	x	NOT APPLICABLE	✓
APPLICABLE	x				
NOT APPLICABLE	✓				
46	Applicability of provisions relating to Startups: <table border="1" data-bbox="448 808 1110 958"> <tr> <td data-bbox="448 808 783 875">APPLICABLE</td> <td data-bbox="783 808 1110 875">x</td> </tr> <tr> <td data-bbox="448 875 783 958">NOT APPLICABLE</td> <td data-bbox="783 875 1110 958">✓</td> </tr> </table>	APPLICABLE	x	NOT APPLICABLE	✓
APPLICABLE	x				
NOT APPLICABLE	✓				
49	Applicability of provisions regarding invoice for reduced value or credit note towards PRS: <table border="1" data-bbox="448 1093 1110 1220"> <tr> <td data-bbox="448 1093 783 1149">APPLICABLE</td> <td data-bbox="783 1093 1110 1149">x</td> </tr> <tr> <td data-bbox="448 1149 783 1220">NOT APPLICABLE</td> <td data-bbox="783 1149 1110 1220">✓</td> </tr> </table>	APPLICABLE	x	NOT APPLICABLE	✓
APPLICABLE	x				
NOT APPLICABLE	✓				

**PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA , ORDER 2017 (Rev dated  
16.09.2020)**

No. P-45021/2/2017-PP (BE-II)  
Government of India  
Ministry of Commerce and Industry  
Department for Promotion of Industry and Internal Trade  
(Public Procurement Section)

Udyog Bhawan, New Delhi  
Dated: 16<sup>th</sup> September, 2020

To

All Central Ministries/Departments/CPSUs/All concerned

**ORDER**

**Subject: Public Procurement (Preference to Make in India), Order 2017– Revision; regarding.**

Department for Promotion of Industry and Internal Trade, in partial modification [Paras 2, 3, 5, 10 & 13] of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017 as amended by Order No.P-45021/2/2017-B.E.-II dated 28.05.2018, Order No.P-45021/2/2017-B.E.-II dated 29.05.2019 and Order No.P-45021/2/2017-B.E.-II dated 04.06.2020, hereby issues the revised 'Public Procurement (Preference to Make in India), Order 2017" dated 16.09.2020 effective with immediate effect.

**Whereas** it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

**Whereas** procurement by the Government is substantial in amount and can contribute towards this policy objective, and

**Whereas** local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

**Now therefore the following Order is issued:**

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
2. **Definitions:** For the purposes of this Order:

*'Local content'* means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*'Class-I local supplier'* means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier' under this Order.

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'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier' under this Order.

'Non - Local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier' under this Order.

'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'Margin of purchase preference' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

'Nodal Ministry' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'.

**3. Eligibility of 'Class-I local supplier'/ 'Class-II local supplier'/ 'Non-local suppliers' for different types of procurement**

(a) In procurement of all goods, services or works in respect of which the Nodal Ministry / Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.

(b) Only 'Class-I local supplier' and 'Class-II local supplier', as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement of all goods, services or works, not covered by sub-para 3(a) above, and with estimated value of purchases less than Rs. 200 Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.

(c) For the purpose of this Order, works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

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### 3A. Purchase Preference

(a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.

(b) In the procurements of goods or works, which are covered by para 3(b) above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.
- ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

(c) In the procurements of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
- ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
- iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

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(d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

**3B. Applicability in tenders where contract is to be awarded to multiple bidders -**

In tenders where contract is awarded to multiple bidders subject to matching of L1 rates or otherwise, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

a) In case there is sufficient local capacity and competition for the item to be procured, as notified by the nodal Ministry, only Class I local suppliers shall be eligible to bid. As such, the multiple suppliers, who would be awarded the contract, should be all and only 'Class I Local suppliers'.

b) In other cases, 'Class II local suppliers' and 'Non local suppliers' may also participate in the bidding process along with 'Class I Local suppliers' as per provisions of this Order.

c) If 'Class I Local suppliers' qualify for award of contract for at least 50% of the tendered quantity in any tender, the contract may be awarded to all the qualified bidders as per award criteria stipulated in the bid documents. However, in case 'Class I Local suppliers' do not qualify for award of contract for at least 50% of the tendered quantity, purchase preference should be given to the 'Class I local supplier' over 'Class II local suppliers'/'Non local suppliers' provided that their quoted rate falls within 20% margin of purchase preference of the highest quoted bidder considered for award of contract so as to ensure that the 'Class I Local suppliers' taken in totality are considered for award of contract for at least 50% of the tendered quantity.

d) First purchase preference has to be given to the lowest quoting 'Class-I local supplier', whose quoted rates fall within 20% margin of purchase preference, subject to its meeting the prescribed criteria for award of contract as also the constraint of maximum quantity that can be sourced from any single supplier. If the lowest quoting 'Class-I local supplier', does not qualify for purchase preference because of aforesaid constraints or does not accept the offered quantity, an opportunity may be given to next higher 'Class-I local supplier', falling within 20% margin of purchase preference, and so on.

e) To avoid any ambiguity during bid evaluation process, the procuring entities may stipulate its own tender specific criteria for award of contract amongst different bidders including the procedure for purchase preference to 'Class-I local supplier' within the broad policy guidelines stipulated in sub-paras above.

4. **Exemption of small purchases:** Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.

5. **Minimum local content:** The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. Nodal Ministry/ Department may prescribe only a higher

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percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier'/ 'Class-II local supplier'. For the items, for which Nodal Ministry/ Department has not prescribed higher minimum local content notification under the Order, it shall be 50% and 20% for 'Class-I local supplier'/ 'Class-II local supplier' respectively.

6. **Margin of Purchase Preference:** The margin of purchase preference shall be 20%.
7. **Requirement for specification in advance:** The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.
8. **Government E-marketplace:** In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.
9. **Verification of local content:**
  - a. The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.
  - b. In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
  - c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.
  - d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.
  - e. Nodal Ministries and procuring entities may prescribe fees for such complaints.
  - f. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

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- g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9h below.
- h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:
  - i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;
  - ii. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
  - iii. in respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted.

**10. Specifications in Tenders and other procurement solicitations:**

- a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.
- b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of 'Class-I local supplier'/ 'Class-II local supplier' who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
- c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.
- d. **Reciprocity Clause**
  - i. When a Nodal Ministry/Department identifies that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to all its procuring entities including CMDs/CEOs of PSEs/PSUs, State Governments and other procurement agencies under their administrative control and GeM for appropriate reciprocal action.

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- ii. Entities of countries which have been identified by the nodal Ministry/Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry/ Department, except for the list of items published by the Ministry/ Department permitting their participation.
  - iii. The stipulation in (ii) above shall be part of all tenders invited by the Central Government procuring entities stated in (i) above. All purchases on GeM shall also necessarily have the above provisions for items identified by nodal Ministry/ Department.
  - iv. State Governments should be encouraged to incorporate similar provisions in their respective tenders.
  - v. The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.
- e. Specifying foreign certifications/ unreasonable technical specifications/ brands/ models in the bid document is restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of Secretary of the Department concerned or any other Authority having been designated such power by the Secretary of the Department concerned.
- f. "All administrative Ministries/Departments whose procurement exceeds Rs. 1000 Crore per annum shall notify/ update their procurement projections every year, including those of the PSEs/PSUs, for the next 5 years on their respective website."
- 10A. Action for non-compliance of the Provisions of the Order:** In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such actions shall be sent to the Standing Committee.
- 11. Assessment of supply base by Nodal Ministries:** The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.
- 12. Increase in minimum local content:** The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.

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**13. Manufacture under license/ technology collaboration agreements with phased indigenization:** While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.

13A. In procurement of all goods, services or works in respect of which there is substantial quantity of public procurement and for which the nodal ministry has not notified that there is sufficient local capacity and local competition, the concerned nodal ministry shall notify an upper threshold value of procurement beyond which foreign companies shall enter into a joint venture with an Indian company to participate in the tender. Procuring entities, while procuring such items beyond the notified threshold value, shall prescribe in their respective tenders that foreign companies may enter into a joint venture with an Indian company to participate in the tender. The procuring Ministries/Departments shall also make special provisions for exempting such joint ventures from meeting the stipulated minimum local content requirement, which shall be increased in a phased manner.

**14. Powers to grant exemption and to reduce minimum local content:** The administrative Department undertaking the procurement (including procurement by any entity under its administrative control), with the approval of their Minister-in-charge, may by written order, for reasons to be recorded in writing,

- a. reduce the minimum local content below the prescribed level; or
- b. reduce the margin of purchase preference below 20%; or
- c. exempt any particular item or supplying entities from the operation of this Order or any part of the Order.

A copy of every such order shall be provided to the Standing Committee and concerned Nodal Ministry / Department. The Nodal Ministry / Department concerned will continue to have the power to vary its notification on Minimum Local Content.

**15. Directions to Government companies:** In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.

**16. Standing Committee:** A standing committee is hereby constituted with the following membership:

Secretary, Department for Promotion of Industry and Internal Trade—Chairman  
Secretary, Commerce—Member  
Secretary, Ministry of Electronics and Information Technology—Member  
Joint Secretary (Public Procurement), Department of Expenditure—Member  
Joint Secretary (DPIIT)—Member-Convenor

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The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

**17. Functions of the Standing Committee:** The Standing Committee shall meet as often as necessary, but not less than once in six months. The Committee

- a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
- b. shall annually assess and periodically monitor compliance with this Order
- c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
- d. may require furnishing of details or returns regarding compliance with this Order and related matters
- e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
- f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization
- g. may consider any other issue relating to this Order which may arise.

**18. Removal of difficulties:** Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.

**19. Ministries having existing policies:** Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1<sup>st</sup> January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

**20. Transitional provision:** This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.



(Rajesh Gupta)  
Director

Tel: 23063211

[rajesh.gupta66@gov.in](mailto:rajesh.gupta66@gov.in)

**CLAUSE REGARDING PROVISION FOR PROCUREMENT FROM A BIDDER WHICH SHARES A LAND BORDER WITH INDIA**

1. Order (Public Procurement No.1) dated 23.07.2020, Order (Public Procurement No.2) dated 23.07.2020 and Order (Public Procurement No.3) dated 24.07.2020, Department of Expenditure, Ministry of Finance, Govt. of India refers. The same are available at website <https://doe.gov.in/procurement-policy-divisions>.

2. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. For details of competent authority refer to Annexure I of Order (Public ProcurementNo.1) dated 23.07.2020.

Further the above will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of creditor in which the Government of India is engaged in development projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of External Affairs, Govt. of India

3. "Bidder"(including the term 'tenderer', 'PMC' 'vendor' or 'service provider' in certain contexts) for purpose of this provision means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.

4. "Bidder from a country which shares a land border with India "for the purpose of this:

- a) An entity incorporated, established or registered in such a country; or
- b) A subsidiary of an entity incorporated, established or registered in such a country; or
- c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d) An entity whose beneficial owner is situated in such a country; or
- e) An Indian(or other) agent of such an entity; or
- f) A natural person who is a citizen of such a country; or
- g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

5. "Beneficial owner" for the purpose of above (4) will be as under:

- i) In case of accompany or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through oneormorejuridicalperson(s),hasacontrollingownershipinterestorwho exercises control through other means.

Explanation-

- a) "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five percent of shares or capital or profits of the company;
  - b) "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their share holding or management rights or shareholders agreements or voting agreements;
- ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  - iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more juridical person, has ownership for entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
  - iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
  - v) In case of a trust; the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
6. "Agent" for the purpose of this Order is a person employed to do any act for another, or to represent another in dealings with third persons

7. **SUBMISSION OF CERTIFICATE IN BIDS:**

Bidders shall submit a certificate in this regard as Form-I.

If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate rejection of the bid / termination and further action as per "Procedure for Action in case of Corrupt / Fraudulent / Collusive / Coercive Practices" of tender document.

8. The registration, wherever applicable, should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply other than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

**9. PROVISION TO BE IN WORKS CONTRACTS, INCLUDING TURNKEY CONTRACTS:**

The successful bidder shall not be allowed to sub-contract works to any contract or from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "contractor from a country which shares a land border with India" shall be as in Para 4 herein above. A Certificate to this regard is to be submitted by bidder is placed at Form-II.

**PREAMBLE TO SCHEDULE OF RATES**

1. The "Schedule of Rates (SOR)" will be in Excel format (password protected) and will be uploaded during tender creation. This will be downloaded by the bidder and bidder will quote price on this Excel file for entire scope of work as per NIT. Thereafter, the bidder will upload the same Excel file during bid submission.
2. The SOR format is provided in a spread sheet file (BoQ\_xxxx.xls). The rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The SOR template must not be modified / replaced by the bidder; else the bid submitted shall be rejected.
3. Bidder shall quote all Prices in INR only. The quoted price will remain firm and fixed till completion of the contract.
4. SOR consists of Schedule of Rates containing Total Lumpsum Consultancy Fee & GST
5. Total Lumpsum Consultancy Fee shall include all Materials/ Equipments/ Services / etc. as per scope of work defined in NIT.
6. The PMC confirms that it has included all taxes, duties, levies etc., as applicable at prevailing rates, in its SCHEDULE OF RATES. In case, PMC has not included any such taxes, duties, levies etc., at all and/or at prevailing rates, PMC has to pay such taxes, duties, levies etc., OWNER shall not be liable for payment of such liabilities and/or OWNER shall not reimburse such taxes, duties, levies etc. to the PMC.
7. The payment to the PMC against this contract (PMC services for Construction of Railway Siding Facilities) shall be limited to the Total Lumpsum Consultancy Fee quoted by them in the SCHEDULE OF RATES (SECTION VII of bidding document), for the due and faithful performance of PMC's obligations under the CONTRACT. The Total Lumpsum Consultancy Fee covers entire consideration payable to PMC for all obligations of PMC. The Total Lumpsum Consultancy Fee is fixed and firm and not subject to any escalation during the contract period unless and otherwise specified in the Contract documents.
8. A copy of SOR, with prices/figures completely blanked out but with the word "QUOTED" in all columns is to be uploaded along with the unpriced bid, as a confirmation of price/data quoted against each head.



### LIST OF FORMS & FORMAT

<b>Form No.</b>	<b>Description</b>
F-1	BIDDER'S GENERAL INFORMATION
F-2	LETTER OF AUTHORITY
F-3	AGREED TERMS & CONDITIONS
F-4	ACKNOWLEDGEMENT CUM CONSENT LETTER
F-5	FORMAT OF LETTER OF NO DEVIATION
F-6	BIDDER'S QUERIES FOR PRE BID MEETING
F-7	CHECK LIST
F-8	E-BANKING FORMAT
F-9	DECLARATION FOR BID SECURITY
F-10	UNDERTAKING REGARDING SUBMISSION OF ELECTRONIC INVOICE (E-INVOICE AS PER GST LAWS)
F-11	FORMAT OF CONTRACT AGREEMENT
F-12	FREQUENTLY ASKED QUESTIONS (FAQ)
F13	DECLARATION REGARDING BANNED/BLACKLISTED/ DELISTING AND LIQUIDATION,COURT RECEIVERSHIP
F-14	FORMAT FOR POWER OF ATTORNEY
F-15	INTEGRITY PACT
FORM-I of Annexure-V	UNDERTAKING FOR APPLICABILTY OF POLICY
FORM-II of Annexure-V	Certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies)
FORM-III of Annexure-V	SALIENT POINTS OF PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) POLICY
Form-I of Annexure-VI	UNDERTAKING ON LETTERHEAD
Form-II of annexure-VI	CERTIFICATE FOR SUB-CONTRACTING OF WORKS

**F-1**

**BIDDER'S GENERAL INFORMATION**

To,  
M/s TALCHER FERTILIZERS LTD

\_\_\_\_\_

TENDER NO:

1	Bidder Name	
2	Status of Firm	Proprietorship Firm/Partnership firm/ Limited/Others  If Others Specify: _____  [Enclose relevant certificates / partnership deed/certificate of Registration, as applicable]
3	Name of Proprietor/Partners/Directors of the firm/company	1. 2. 3.
4	Number of Years in Operation	
5	Address of Registered Office:  In case of Partnership firm, enclose letter mentioning current address of the firm and the full names and current addresses of all the partners of the firm.	City: District: State: PIN/ZIP:
6	Bidder's address where order/contract is to be placed *	City: District: State: PIN/ZIP:
7	Address from where Goods/ Services are to be dispatched/ provided along with GST no. <i>(In case supply of Goods/ Services are from multiple locations, addresses and GST no. of all such locations are to be provided).</i> (Indian Bidder only)	City: District: State: PIN/ZIP: GST No.:
8	Telephone Number of address where order is to be placed	_____ (Country Code) (Area Code) (Telephone No.)
9	E-mail address	

10	Website	
11	Fax Number:	(Country Code) (Area Code) (Telephone No.)
12	ISO Certification, if any	{If yes, please furnish details}
13	PAN No.	[Enclose copy of PAN Card]
14	GST No.(refer sl. no. 7 above)	[Enclose copy of GST Certificate]
15	Whether Micro or Small Enterprise	Yes / No <i>(If Yes, Bidder to submit requisite documents as specified in ITB: Clause No. 36)</i>
	Whether MSE is owned by SC/ST Entrepreneur(s)	Yes / No <i>(If Yes, Bidder to submit requisite documents as specified in ITB: Clause No. 36)</i>
	Whether MSE is owned by Women	Yes / No <i>(If Yes, Bidder to submit requisite documents as specified in ITB: Clause No.36)</i>
16	Type of Entity	Corporate/ Non-Corporate (As per CGST/SGST/UTGST Act). (In case of Non-Corporate Entity, bidder will submit documentary evidence for same).

Note: \* TFL intent to place the order/contract directly on the address from where Goods are produced/dispached are Services are rendered. In case, bidder wants order/ contract at some other address or supply of Goods/ Services from multiple locations, bidder is required to provide in their bid address on which order is to be placed

Place:  
Date:

[Signature of Authorized Signatory of Bidder]  
Name:  
Designation:  
Seal:

**F-2**  
**LETTER OF AUTHORITY**

[Pro forma for Letter of Authority for Attending 'Pre-Bid Meetings' /'Un-priced Bid Opening' /  
'Price Bid Opening']

Ref:  
To,  
M/s TALCHER FERTILIZERS LTD  
\_\_\_\_\_

Date:

SUB:  
TENDER NO:

**Dear Sir,**

I/We, \_\_\_\_\_ hereby authorize the following representative(s) for attending any 'Meetings [Pre-Bid Meeting]', 'Un-priced Bid Opening' and 'Price Bid Opening' against the above Tender Documents:

[1] Name & Designation \_\_\_\_\_ Signature \_\_\_\_\_  
Phone/Cell: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: ..... @ .....

[2] Name & Designation \_\_\_\_\_ Signature \_\_\_\_\_  
Phone/Cell: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: ..... @ .....

We confirm that we shall be bound by all commitments made by aforementioned authorised representative(s).

Place: \_\_\_\_\_ [Signature of Authorized Signatory of Bidder]  
Date: \_\_\_\_\_ Name: \_\_\_\_\_  
Designation: \_\_\_\_\_  
Seal: \_\_\_\_\_

- Note:
- (i) This "Letter of Authority" should be on the "**letterhead**" of the Bidder and should be signed by a person competent and having the 'Power of Attorney' to bind the Bidder. Not more than 'two [02] persons per Bidder' are permitted to attend 'Pre-Bid Meetings' /'Un-priced Bid Opening' / 'Price Bid Opening'.
  - (ii) Bidder's authorized representative is required to carry a copy of this authority letter while attending the 'Pre-Bid Meetings' /'Un-priced Bid Opening'.

**F-3**

**AGREED TERMS & CONDITIONS**

To,  
**M/s TALCHER FERTILIZERS LIMITED**  
**NOIDA**

SUB:  
TENDER NO:

This Questionnaire duly filled in, signed & stamped must form part of Bidder's Bid and should be returned along with Un-priced Bid. Clauses confirmed hereunder need not be repeated in the Bid.

<b>Sl.</b>	<b>DESCRIPTION</b>	<b>BIDDER'S CONFIRMATION</b>
1	Bidder's name and address	
2.	Bidder confirms currency of quoted prices is in Indian Rupees	
3.	Bidder confirms quoted prices will remain firm and fixed till complete execution of the order.	
3.1	Bidder confirms that they have quoted rate of <b>GST (CGST &amp; SGST/ UTGST or IGST)</b> in Price Schedule / Schedule of Rates (SOR)	Confirmed
3.2	Service Accounting Codes (SAC)/ Harmonized System of Nomenclature (HSN)	
3.3	Bidder hereby confirms that the quoted prices are in compliance with the Section 171 of CGST Act/ SGST Act as mentioned as clause no. 13.10 of ITB	
3.4	a. Whether bidder is liable to raise E-Invoice as per GST Act. b. If yes, bidder will raise E-Invoice and confirm compliance to provision of tender in this regard.	a. _____ b. _____
4.	Bidder confirms acceptance of relevant Terms of Payment specified in the Bid Document.	
5.	Bidder confirms compliance to Completion Period as specified in Bid document. Confirm contract period shall be reckoned from the date of FOA.	
6.	(i) Bidder confirms acceptance of Price Reduction Schedule (PRS) for delay in completion schedule specified in Bid document. (ii) In case of delay, the bills shall be submitted after deducting the mutually agreed damages due to delay (refer PRS Clause).	
7	Bidder have furnished Bid Security Declaration.	
8.	a) Bidder confirms acceptance of all terms and conditions of Bid Document (all sections). b) Bidder confirms that printed terms and conditions of bidder are not applicable.	
9.	Bidder confirms that their offer is valid for period specified in BDS from Final/Extended due date of opening of Techno-commercial Bids.	
10.	As per requirement of tender, bidder (having status as Pvt. Ltd. or Limited company) must upload bid duly digitally signed on e-portal through class-3B digital signature (DS). In case, class of DS or name of employee or name of employer is not visible in the digitally signed documents, the bid digitally signed as submitted by the person shall be binding on the bidder.	

SI.	DESCRIPTION	BIDDER'S CONFIRMATION
11.	All correspondence must be in ENGLISH language only	
12.	Bidder confirms the contents of this Tender Document have not been modified or altered by them. In case, it is found that the tender document has been modified / altered by the bidder, the bid submitted by them shall be liable for rejection.	
13.	Bidder confirms that all Bank charges associated with Bidder's Bank shall be borne by Bidder.	
14.	<p><u>No Deviation Confirmation:</u> It may be note that any 'deviation / exception' in any form may result in rejection of Bid. Therefore, Bidder confirms that they have not taken any 'exception / deviation' anywhere in the Bid. In case any 'deviation / exception' is mentioned or noticed, Bidder's Bid may be rejected.</p>	
15.	<p>If Bidder becomes a successful Bidder and pursuant to the provisions of the Tender Document, award is given to them against subject Tender Document, the following Confirmation shall be automatically enforceable:</p> <p>"We agree and acknowledge that the Employer is entering into the Contract/Agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood &amp; agreed that the Government of India is not a party to the Contract/Agreement and has no liabilities, obligations or rights thereunder. It is expressly understood and agreed that the Purchaser is authorized to enter into Contract/Agreement, solely on its own behalf under the applicable laws of India. We expressly agree, acknowledge and understand that the Purchaser is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the Agreement. Accordingly, we hereby expressly waive, release and forego any and all actions or claims, including cross claims, VIP claims or counter claims against the Government of India arising out of the Agreement and covenants not to sue to Government of India as to any manner, claim, cause of action or things whatsoever arising of or under the Agreement."</p>	
16.	Bidder to ensure all documents as per tender including clause 11 of Section III and all Formats are included in their bid.	
17.	Bidder understands that Tender Document is not exhaustive. In case any activity though specifically not covered in description of 'Schedule of Rates' but is required to complete the work as per Scope of Work, Conditions of Contract, or any other part of Bidding document, the quoted rates will deemed to be inclusive of cost incurred for such activities unless otherwise specifically excluded. Bidder confirms to perform for fulfilment of the contract and completeness of the supplies in all respect within the scheduled time frame and quoted price.	
18.	Bidder hereby confirms that they are not on „Holiday“ by OWNER or any of the JV partners of OWNER (viz. GAIL, RCF, CIL, FCIL) or Public Sector Consultant (like PDIL, EIL, Mecon only due to “poor performance” or “corrupt and fraudulent practices”) or banned by Government department/ Public Sector on due date of	

SI.	DESCRIPTION	BIDDER'S CONFIRMATION
	<p>submission of bid.</p> <p>Further, neither bidder nor their allied agency/(ies) (as defined in the Procedure for Action in case of Corrupt/Fraudulent/Collusive/Coercive Practices) are on banning list of TFL or any of the JV partner of OWNER viz. GAIL, RCF, CIL, FCIL.</p> <p>Bidder also confirms that they are not under any liquidation, court receivership or similar proceedings or 'bankruptcy'.</p> <p>In case it comes to the notice of TFL/PDIL that the bidder has given wrong declaration in this regard, the same shall be dealt as „fraudulent practices“ and action shall be initiated as per the Procedure for action in case of Corrupt/Fraudulent/Collusive/Coercive Practices.</p> <p>Further, Bidder also confirms that in case there is any change in status of the declaration prior to award of contract, the same will be promptly informed to TFL/PDIL by them.</p>	
19.	Bidder confirms that, in case of contradiction between the confirmations provided in this format and terms & conditions mentioned elsewhere in the offer, the confirmations given in this format shall prevail.	
	Bidders confirm to submit signed copy of Integrity Pact (wherever included in tender).	

Place:  
Date:

[Signature of Authorized Signatory of Bidder]  
Name:  
Designation:  
Seal:

**ACKNOWLEDGEMENT CUM CONSENT LETTER**

(On receipt of tender document/information regarding the tender, Bidder shall acknowledge the receipt and confirm his intention to bid or reason for non-participation against the enquiry /tender through e-mail/fax to concerned executive in TFL/PDIL issued the tender, by filling up the Format)

To,

M/s TALCHER FERTILIZERS LTD,

\_\_\_\_\_

SUB:

TENDER NO:

Dear Sir,

We hereby acknowledge receipt of a complete set of Tender Document along with enclosures for subject item/job and/or the information regarding the subject tender.

- We intend to bid as requested for the subject item/job and furnish following details with respect to our quoting office:

Postal Address with Pin Code : .....

Telephone Number : .....

Fax Number : .....

Contact Person : .....

E-mail Address : .....

Mobile No. : .....

Date : .....

Seal/Stamp : .....

- We are unable to bid for the reason given below:

Reasons for non-submission of bid:

\_\_\_\_\_

Agency's Name : .....

Signature : .....

Name : .....

Designation : .....

Date : .....

Seal/Stamp : .....



**F-5**  
**FORMAT OF LETTER OF NO DEVIATIONS**

(ON BIDDER'S LETTERHEAD)

(NIT NO : PNMM/PC183/E-4014/NCB DATED 10.12.2021)

We \* hereby agree to fully comply with, abide by and accept without variation, deviation or reservation all technical, commercial and other condition whatsoever of the Bidding Documents and all Addenda / Corrigenda / Amendment/ Clarifications issued by OWNER.

We further hereby confirm that the bid is submitted in accordance of Tender Document and contains no deviation and the price bid submitted may be treated to conform to, in all respects, with the terms and conditions of the said tender documents including all Addenda / Corrigenda/ Amendment /Clarifications.

For and on behalf of\* : .....

Stamp & Signature\*\* : .....

Name : .....

Designation : .....

Date : .....

F-6

**BIDDER'S QUERIES FOR PRE BID MEETING**

To,

M/s TALCHER FERTILIZERS LTD

Sub :

Tender No :

SL · N O.	REFERENCE OF TENDER DOCUMENT				BIDDER'S QUERY	TFL'S REPLY
	SEC. NO.	Page No.	Clause No.	Subject		

**NOTE: The Pre-Bid Queries may be sent by fax and also by e-mail before due date for receipt of Bidder's queries.**

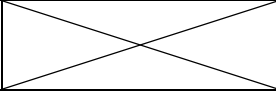
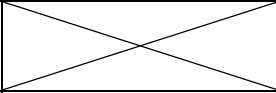
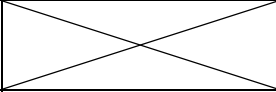
**SIGNATURE OF BIDDER:** \_\_\_\_\_

**NAME OF BIDDER :** \_\_\_\_\_

**F-7**  
**CHECK LIST**

Bidders are requested to duly fill in the checklist. This checklist gives only certain important items to facilitate the bidder to make sure that the necessary data/information as called for in the bid document has been submitted by them along with their offer. This, however, does not relieve the bidder of his responsibilities to make sure that his offer is otherwise complete in all respects.

Please ensure compliance and tick (√) against following points:

S. No.	DESCRIPTION	CHECK BOX	REFERENCE PAGE NO. OF THE BID SUBMITTED
1.0	Confirm that the following details have been submitted in the Un-priced part of the bid		
i	Covering Letter, Letter of Submission		
ii	Digitally signed (in case of e-tendering) tender document along with drawings and addendum (if any)		
iii	Power of Attorney in the name of person signing the bid.		
iv	Confirm submission of documents alongwith unpriced bid as per tender requirement.		
2.0	Confirm that all forms duly filled in are enclosed with the bid duly signed by authorised person(s) – Refer cl.no.11 of Section-III		
3.0	Confirm that the price part as per Schedule of Rates format submitted with Bidding Document/ uploaded in case of e-bid.		
4.0	Confirm that Undertaking as per Form-I & Form-II of Annexure-VI to Section-III have been submitted by the bidder (Guidelines from Procurement from a Country sharing a Land Border with India)		
5.0	Confirm that Undertaking as per Form III of Annexure-V to Section-III has been submitted (applicable for MSE and PP-LC bidder).		
6.0	Confirm that Undertaking as per Form-II to Annexure-V to Section-III and Certification from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies) as per Form-I to Annexure-V to Section-III are submitted.		

Place  
Date

Signature of Authorized Signatory of Bidder  
Name:  
Designation:  
Seal

**F-8**

**E-Banking Mandate Form**

(To be issued on vendors letter head)

- i. Vendor/customer Name :
  
- 2. Vendor/customer Code:
  
- 3. Vendor /customer Address:
  
- 4. Vendor/customer e-mail id:
  
- 5. Particulars of bank account
  - a) Name of Bank
  - b) Name of branch
  - c) Branch code:
  - d) Address:
  - e) Telephone number:
  - f) Type of account (current/saving etc.)
  - g) Account Number:
  - h) RTGS IFSC code of the bank branch
  - i) NEFT IFSC code of the bank branch
  - j) 9 digit MICR code

I/We hereby authorize TFL to release any amount due to me/us in the bank account as mentioned above. I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold the TFL responsible.

(Signature of vendor/customer)

**BANK CERTIFICATE**

We certify that ----- has an Account no. ----- with us and we confirm that the details given above are correct as per our records.

Bank stamp

Date

(Signature of authorized officer of bank)

**F-9**  
**DECLARATION FOR BID SECURITY**  
**(To be submitted on Letter head of Bidder)**

To,  
M/s Talcher Fertilizers Limited

---

**SUB:**  
**TENDER NO:**

**Dear Sir**

After examining / reviewing provisions of above referred tender documents (including all corrigendum/ Addenda), we M/s\_\_\_\_\_ (*Name of Bidder*) have submitted our offer/ bid no. ....

We, M/s\_\_\_\_\_ (*Name of Bidder*) hereby understand that, according to your conditions, we are submitting this Declaration for Bid Security.

We understand that we will be put on watch list/holiday/ banning list (as per polices of TFL in this regard), if we are in breach of our obligation(s) as per following:

- (a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- (b) having been notified of the acceptance of our Bid by the TFL during the period of bid validity:
  - (i) fail or refuse to execute the Contract, if required, or
  - (ii) fail or refuse to furnish the Contract Performance Security, in accordance provisions of tender document.
  - (iii) fail or refuse to accept 'arithmetical corrections' as per provision of tender document.
- (c) having indulged in corrupt/fraudulent /collusive/coercive practice as per procedure.

Place: [Signature of Authorized Signatory of Bidder]  
Date: Name:  
Designation:  
Seal:

**F-10**

**UNDERTAKING REGARDING SUBMISSION OF ELECTRONIC INVOICE (E-INVOICE AS PER GST LAWS)**

**(to be submitted on letter head along with documents for release of payment)**

To,

M/s TALCHER FERTILIZERS LIMITED

\_\_\_\_\_

SUB:

LOA NO:

**Dear Sir,**

We \_\_\_\_\_ (Name of the Supplier/Contractor/Service Provider/ PMC) hereby confirm that E-Invoice provision as per the GST Law is

- |      |                      |   |   |
|------|----------------------|---|---|
| (i)  | Applicable to us     | [ | ] |
| (ii) | Not Applicable to us | [ | ] |

**(Supplier/Contractor/Service Provider/ PMC is to tick appropriate option (✓ or X) above).**

In case, same is applicable to us, we confirm that we will submit E-Invoice after complying with all the requirements of GST Laws. If the invoice issued without following this process, such invoice can-not be processed for payment by TFL as no ITC is allowed on such invoices. We also confirm that If input tax credit is not available to TFL for any reason attributable to Supplier/Contractor/Service Provider/ PMC (both for E-invoicing cases and non-E-invoicing cases), then TFL shall not be obligated or liable to pay or reimburse GST (CGST & SGST/UTGST or IGST) claimed in the invoice(s) and shall be entitled to deduct / setoff / recover such GST amount (CGST & SGST/UTGST or IGST) or Input Tax Credit amount together with penalties and interest, if any, by adjusting against any amounts paid or becomes payable in future to the Supplier/Contractor/Service Provider/ PMC under this contract or under any other contract.

Place:  
Date:

[Signature of Authorized Signatory of Bidder]  
Name:  
Designation:  
Bidder Name:  
Seal:

**Contract Agreement Form**

AGREEMENT for “ \_\_\_\_\_”(hereinafter called the "Job") made on \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ between M/s \_\_\_\_\_, hereinafter called the “PMC” (which term shall unless excluded by or repugnant to the subject or context include its successors and permitted assignees) of the one part and Talcher Fertilizers Limited hereinafter called “TFL” (which term shall unless excluded by or repugnant to the subject or context include its successors and assignees) of the other part.

**WHEREAS**

TFL being desirous of having provided for execution of certain work mentioned, enumerated or referred to in the DLOA including Completion Schedule of job has called for proposal.

- A. The PMC has examined the Job specified in TENDER of TFL and has satisfied himself by careful examination before submitting his proposal as to the nature of the Job and local conditions, the nature and magnitude of the Job, the availability of manpower and materials necessary for the execution of Job and has made local and independent enquiries and obtained complete information as to the matters and thing referred to, or implied in DLOA or having any connection therewith and has considered the nature and extent of all probable and possible situations, delays, hindrances or interference’s to or with the execution and completion of the Job to be carried out under the Agreement, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and auxiliary thereof affecting the completion of the Job and which might have included him in making his proposal.
- B. The DLOA including Completion Schedule of Job and Letter of Acceptance of proposal form part of this Agreement though separately set out herein and are included in the expression Agreement wherever herein used.

**AND WHEREAS**

TFL/PDIL accepted the bid of the PMC for the provision and the execution of the said Job at the values stated in bid and finally approved by TFL upon the terms and subject to the conditions of Agreement.

**NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED AND DECLARED AS FOLLOWS :**

- 1. In consideration of the payment to be made to the PMC for the Job to be executed by him the PMC hereby covenants with TFL that the PMC shall and will duly provide, execute and complete the said Job and shall do and perform all other acts and things in the Agreement mentioned or described or which are to be implied there from or may be reasonably necessary for the completion of the said Job and at the said times and in the manner and subject to the terms and conditions or stipulations mentioned in the Agreement.
- 2. In consideration of the due provision execution and completion of the said Job, TFL does hereby agree with the Agreement that TFL will pay to the PMC the respective amounts for the Job actually done by him and approved by TFL at the amount specified in this DLOA, such payment to be made at such time in such manner as provided for in the Agreement and DLOA.

In witness whereof the parties have executed these presents in the day and the year first above written.

Signed and Delivered for  
for and on behalf of

**M/s TALCHER FERTILIZERS LIMITED**

\_\_\_\_\_

Date : \_\_\_\_\_

Place: \_\_\_\_\_

IN PRESENCE OF TWO WITNESSES

1. \_\_\_\_\_

2. \_\_\_\_\_

Signed and Delivered  
and on behalf of

**M/s** \_\_\_\_\_

\_\_\_\_\_

Date : \_\_\_\_\_

Place: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_



F-12

FREQUENTLY ASKED QUESTIONS (FAQs)

SL.NO.	QUESTION	ANSWER
1.0	Is attending Pre Bid Meeting mandatory.	<i>No. Refer Clause No. 15 of Instruction to Bidders of Tender Document. However attending Pre Bid Meeting is recommended to sort out any issue before submission of bid by a Bidder.</i>
2.0	Can a vendor submit more than 1 offer?	<i>No. Please refer Clause No. 3 of Instruction to Bidders of Tender Document.</i>
3.0	Is there any Help document available for e-Tender.	<i>Yes. Refer, E-tendering website of CPP portal (<a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>)</i>
4.0	Are there are any benefits available to Startups?	<i>Refer Clause No. 46 of Instructions to Bidders of Tender Document.</i>
5.0	Are there are any MSE (Micro & Small Enterprises) benefits available?	<i>Refer Clause No. 36 of Instructions to Bidders of Tender Document.</i>

---

All the terms and conditions of Tender remain unaltered.

F-13

**DECLARATION REGARDING BANNED/BLACKLISTED/DELISTING  
AND LIQUIDATION,COURT RECEIVERSHIP  
(TO BE PROVIDED ON COMPANY'S LETTER HEAD)**

To,

M/s Talcher Fertilizers Limited,

SUB: TENDER NO:

**Dear Sir,**

We hereby confirm that we have not been banned or blacklisted or de-listed or put on Holiday by any Government / Quasi-Government / Public Sector Undertaking on due date of submission of bid.

We also confirm that we are not under any liquidation, court receivership or similar proceedings or 'bankruptcy'.

If it is found at a later date that the Contractor has secured the contract by furnishing wrong information or by suppressing facts in the bid submitted, Talcher Fertilizers Limited (TFL) reserves the right to cancel the contract and forfeit the EMD/ Security cum Performance Guarantee and put the CONTRACOR on Holiday / Banned / Blacklist list of TFL and of it's JV partners.

Further, we also confirm that in case there is any change in status of the declaration prior to award of contract, the same will be promptly informed to TFL by us.

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

**F-14**  
**POWER OF ATTORNEY (POA)**  
**(To be submitted on the Non-Judicial stamp paper / Company's Letter Head)**

TENDER NO:

Description of work:

Name of Bidder: \_\_\_\_\_

"The undersigned \_\_\_\_\_ (Name of LEGAL PERSON, i.e. CEO/C&MD/Company Secretary/Partners) is lawfully authorized to issue this POA\* on behalf of the company M/s \_\_\_\_\_ (Name of bidder) whose registered address is \_\_\_\_\_ and does hereby appoint Mr./Ms \_\_\_\_\_ (name of authorized person signing the bid document) \_\_\_\_\_ (Designation) of \_\_\_\_\_ M/s \_\_\_\_\_ (Name of bidder) whose signature appears below to be the true and lawful attorney/(s) and authorize him/her to sign the bid (both physically & digitally on CPP Portal), conduct negotiation, sign contracts and execute all the necessary matter related thereto, in the name and on behalf of the company in connection with the tender no. \_\_\_\_\_.

The signature of the authorized person/(s) herein constitutes unconditional obligations of M/s \_\_\_\_\_ (Name of bidder).

This Power of Attorney (POA) shall remain valid and in full force and effect before we withdraw it in writing (by fax, or mail or post). All the documents signed (within the period of validity of the Power of Attorney) by the authorized person herein shall not be invalid because of such withdrawal.

(\*) In case of a single Bidder, the Power of Attorney shall be issued as per the constitution of the bidder as below.

- a) **In case of Proprietorship:** By Proprietor
- b) **In case of Partnership:** by all Partners or Managing Partner.
- c) **In case of Limited Liability Partnership:** by any bidder's employee authorized in terms of Deed of LLP.
- d) **In case of Public /Limited Company:** POA in favour of authorized employee(s) by Board of Directors through Board Resolution or by the designated officer authorized by Board to do so. Such Board Resolution should be duly countersigned by Company Secretary / MD / CMD / CEO.

SIGNATURE OF THE LEGAL PERSON

\_\_\_\_\_  
(Name of person with Company seal)

SIGNATURE OF THE AUTHORIZED PERSON  
(FOR SIGNING THE BID)

\_\_\_\_\_  
(Signature)  
Name of person: \_\_\_\_\_  
E-mail id: \_\_\_\_\_  
DSC (Digital Signature Certificate) No.: \_\_\_\_\_

**FORM F-15**  
**INTEGRITY PACT**

# **INTEGRITY PACT**


## INTEGRITY PACT

### INTRODUCTION:

TFL as one of its endeavour to maintain and foster most ethical and corruption free business environment, have decided to adopt the Integrity Pact, a tool developed by the Transparency International, to ensure that all activities and transactions between the Company (TFL) and its Counterparties (Bidders, Contractors, Vendors, Suppliers, Service Providers/Consultants etc.) are handled in a fair and transparent manner, completely free of corruption.

Considering the above, the details mentioned at attached Annexure-1 are applicable as stated in Instruction to Bidders of Bid Document in addition to the existing stipulation regarding Corrupt and Fraudulent Practices.

The attached copy of the Integrity Pact at Annexure - 2 shall be included in the Bid submitted by the bidder (to be executed by the bidder for all tenders of value Rs. 1 (One) crore and above). In case a bidder does not sign the Integrity Pact, his bid shall be liable for rejection.



## ANNEXURE-1

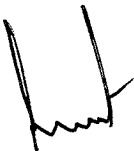
Bidder is required to sign the Integrity Pact with TFL as per format & terms and conditions enclosed with tender. In case a bidder does not sign the Integrity Pact, his bid shall be liable for rejection.

### I COMMITMENTS AND OBLIGATIONS OF THE "COUNTERPARTY"

- a) The Counterparty, directly or indirectly (through agent, consultant, advisor, etc.), shall not pay any bribe/ influence or give undue/ unlawful benefit to anyone to gain undue advantage in dealing with TFL.
- b) The Counterparty will not engage in collusion of any kind including price fixation etc. with other Counterparts.
- c) The counterparty will not pass TFL's confidential information to any third party unless specifically authorized by TFL in writing.
- d) The Counterparties shall promote and observe best ethical practices within their respective organizations.
- e) The Counterparty shall inform the Independent External Monitor.
  - i) If it received any demand, directly or indirectly, for a bribe/ favour or any illegal gratification/ payment / benefit;
  - ii) If it comes to know of any unethical or illegal payment / benefit;
  - iii) If it makes any payment to any TFL associate.
- f) The Counterparty shall not make any false or misleading allegations against TFL or its associates.

### II VIOLATIONS & CONSEQUENCES:

- a) If a Counterparty commits a violation of its Commitments and Obligations under the Integrity Pact Programme during bidding process, their entire Earnest Money Deposit/ Bid Security, would be forfeited and in addition, action shall be taken as per "Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices"
- b) In case of violation of the Integrity pact by Counterparty after award of the Contract, TFL shall be entitled to terminate the Contract. Further, TFL would forfeit the security deposits/ Contract Performance Bank Guarantee and in addition, action shall be taken as per "Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices"

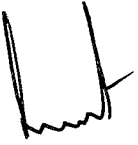


### **INDEPENDENT EXTERNAL MONITORS (IEMS)**

Presently the panel consisting of the following Independent External Monitors (IEMs) have been appointed by TFL, in terms of Integrity Pact (IP) which forms part of TFL Tenders / Contracts.

- i) Shri Anjan Kumar Banerjee (Email ID: [banerjeeanjan@gmail.com](mailto:banerjeeanjan@gmail.com))
- ii) Shri Atul Sobti (Email ID: [sobtiatul@gmail.com](mailto:sobtiatul@gmail.com))

This panel is authorised to examine / consider all references made to it under this tender. The bidder(s), in case of any dispute(s) / complaint(s) pertaining to this tender may raise the issue either with the designated tender issuing officer or Nodal Officer (presently Sh. S. Dasgupta, DGM (C&P) – Email: [sdasgupta@gail.co.in](mailto:sdasgupta@gail.co.in)) in TFL or directly with the IEMs on the panel or IEM c/o Chief Vigilance Officer, Rashtriya Chemicals and Fertilizers Ltd., Priyadarshini Building, Eastern Express Highway, Sion, Mumbai Maharashtra, 400022.





**INTEGRITY PACT**

(To be executed on plain paper)

Between TFL (India) Limited, a Government of India Public Sector, (here-in-after referred to as "Principal").

**AND**

\_\_\_\_\_ (here-in-after referred to as "The Bidder/ Contractor").

(Principal and the Bidder / Contractor are here-in-after are referred to individually as "Party" or collectively as "Parties").

**PREAMBLE**

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

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

**Section 1 – Commitments of the Principal**

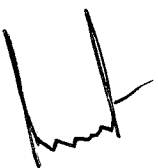
1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following Principles:-
  - i) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or for a third person, any material or immaterial benefit which the person is not legally entitled to.
  - ii) The Principal will, during the tender process treat all Bidder(s) with equity and reasons. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.



- iii) The Principal will exclude from the process all known prejudiced persons.
2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC) / Prevention of Corruption Act (PC Act), or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officers and in addition can initiate disciplinary actions.

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

1. The Bidder(s) / Contractor(s) commits themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commits themselves to observe the following principles during participation in the tender process and during the contract execution:
- i) The Bidder (s) / Contractor (s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
  - ii) The Bidder (s) / Contractor (s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other action to restrict competitiveness or to introduce cartelisation in the bidding process.
  - iii) The Bidder (s) / Contractor (s) will not commit any offence under the relevant IPC/PC Act; further, the Bidder (s) / Contractor (s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - iv) The Bidder (s)/ Contractor (s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder (s)/ Contractor (s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further, all the payments made to the Indian agent/ representative have to be in India Rupees only.
  - v) The Bidder (s) / Contractor (s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents,



brokers or any other intermediaries in connection with the award of the contract.

vi) Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

2. The Bidder(s)/ Contractor(s) shall not instigate third person to commit offences outlined above or be an accessory to such offences.

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

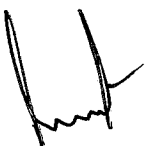
If the Bidder (s) / Contractor (s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder (s) / Contractor (s) from the tender process or take action as per provisions of “Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices”.

**Section 4 – Compensation for Damages**

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

**Section 5 – Previous transgression**

1. The Bidder declares that no previous transgression occurred in the last three years, with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or actions can be taken as per provisions of “Procedure for action in case Corrupt /Fraudulent/ Collusive/Coercive Practices”



### **Section 6 – Equal treatment to all Bidders / Contractors / Subcontractors**

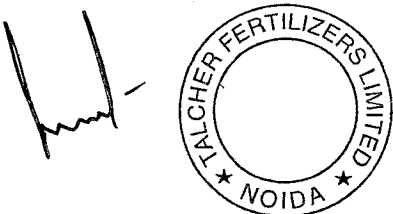
1. In case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured by him that all sub-contractors also sign the IP.
2. The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

### **Section 7 – Criminal charges against violating Bidder (s) / Contractor (s) / Sub-contractor (s)**

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

### **Section 8 –Independent External Monitor / Monitors**

1. The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all documents / records pertaining to the contract for which a complaint or issue is raised before them, as and when warranted. However, the documents / records / information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed. It will be obligatory for him/her to treat the information and documents of the Bidders / Contractors as confidential. He / she reports to MD, TFL.
3. The Bidder (s)/ Contractor (s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an



impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

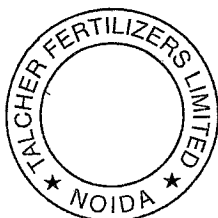
5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
6. The Monitor will submit a written report to MD, TFL within 30 days from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
7. If the Monitor has reported to MD, TFL, a substantiated suspicion of an offence under relevant IPC/PC Act, and MD, TFL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, then, only in case of very serious issue having a specific verifiable Vigilance angle, the matter should be reported directly to the Central Vigilance Commission.
8. The word 'Monitor' would include both singular and plural.
9. In case of any complaints referred under IP Program, the role of IEMs is advisory and would not be legally binding and it is restricted to resolving the issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidder.
10. After award of contract, the IEMs shall look into any issue relating to execution of contract, if specifically raised before them. As an illustrative example, if a contractor who has been awarded the contract, during the execution of contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs.

#### **Section 9 – Pact Duration**

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded. Any violation to the same would entail disqualification of the bidders and exclusion from future business dealing.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by MD, TFL.

#### **Section 10 – Miscellaneous provisions**



1. This agreement is subject to Indian Law. Place of performance and exclusive jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
2. Changes and supplements as well as termination notices, if any, need to be made in writing. Side agreements have not been made.
3. If the Contractor/Bidder is a Joint Venture or a partnership concern or a consortium, this agreement must be signed by all partners or consortium members.
4. Should one or several of the provisions of this agreement turn out to be invalid, the remainder of this agreement shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions in such a case.
5. Issues like warranty / guarantee, etc. shall be outside the purview of IEMs.
6. In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in Integrity Pact will prevail.



एस. दासगुप्ता / S. DASGUPTA  
 (For & on Behalf of Principal)  
 जेप. महाप्रबन्धक (सिद्धि एवं कृषि) / Jp. General Manager (C&P)  
 फाल्चर फर्टिलाइजर्स लिमिटेड / Falcher Fertilizers Ltd.  
 जीटीआरसी पीएआरसी बिल्डिंग / GTI PARC Building  
 प्लॉट नं० 24, सेक्टर-16ए, नोएडा-201301 (उ.प्र.)  
 Plot No. 24, Sec.-16A, Noida-201 301(U.P.)  
 (Office Seal)

-----  
 (For & on Behalf of Bidder/Contractor)  
 (Office Seal)

Place -----  
 Date -----

Witness 1:  
 (Sign, Name & Address)  
 [FOR PRINCIPAL]

Geogem (SURA DEOGAM)  
 Talcher Fertilizers Limited (TFL), Plot No. 24,  
 Sector-16A, Film City, Noida (U.P.) - 201301

Witness 2:  
 (Sign, Name & Address)  
 [FOR BIDDER / CONTRACTOR]

.....  
 .....  
 .....

**UNDERTAKING FOR APPLICABILITY OF POLICY**

**To,  
M/s Talcher Fertilizers Limited**

**SUB:**

**TENDER NO:**

Dear Sir

We, M/s\_\_\_\_\_ (*Name of Bidder*) hereby confirm that following purchase preference to be considered:-

Description	Preference
Purchase Preference under Public Procurement Policy for MSE	<input type="text"/>
Policy to Provide Purchase Preference (linked with local content)	<input type="text"/>

Note:

- (i) Please indicate your preference against only one policy.
- (ii) The above preference shall be extended only after submission of requisite documents (as mentioned in the tender documents).
- (iii) In case a bidder is eligible to seek benefit under PP-LC policy as well as PPP for MSE 2012, then the bidder should categorically seek benefits against only one of the two policies i.e. either PP-LC and MSE policy.
- (iv) In case a MSEs bidder opts for purchase preference based on PP-LC, he shall not be entitled to claim purchase preference benefit available to MSE Bidders under PPP for MSE 2012.
- (v) The option once exercised cannot be modified subsequently.

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

**FORM-II of ANNEXURE-V**

**CERTIFICATE FROM STATUTORY AUDITOR OR COST AUDITOR OF THE COMPANY (IN THE CASE OF COMPANIES) OR FROM A PRACTICING COST ACCOUNTANT OR PRACTICING CHARTERED ACCOUNTANT (IN RESPECT OF SUPPLIERS OTHER THAN COMPANIES) TOWARDS MINIMUM LOCAL CONTENT**

To,  
M/s Talcher Fertilizers Limited

SUB:  
TENDER NO:

Dear Sir,

A. We..... the Statutory Auditor / Cost Auditor / Practicing Cost Accountant / Practicing Chartered Accountant) have verified relevant records of M/s ..... (Name of the bidder) and certify that M/s ..... (Name of the bidder) meets the following:

Sl. No.	Description	Confirmation
A	Bidder meets the mandatory minimum Local content requirement of 20% for participating in the Bidding process under Public Procurement (Preference to Make in India) Policy. (In case bidder does not meet the minimum Local content requirement of 20%, such bidders are not allowed to participate in the Bidding process)	Confirmed.
B	The bidder meets mandatory minimum Local content requirement of 50% for claiming purchase preference under Public Procurement (Preference to Make in India) Policy	Confirmed / Not Confirmed

B. The **details of the location** at which the local value addition is made as follows:

Sl. No.	Item Description	Details of the Location(s) where the local value addition is made
1.		
2.		
3.		

Name of Audit Firm / Chartered Accountant:

[Signature of Authorized Signatory]

Date:

Name:

Designation:

Seal:

Membership No.:

UDIN:



**FORM-III of ANNEXURE-V**

**Salient Points of Public Procurement (Preference to Make in India) Policy**

<b>Sr. No.</b>	<b>Description</b>	<b>Parameter / Document</b>
<b>1</b>	<b>Minimum Local Content (LC) for Availing Preference under this Policy</b>	50%
<b>2</b>	<b>Margin of Purchase Preference</b>	20%
<b>3</b>	<b>Local Content (LC) % declared by bidder</b> (Documents to be submitted as per Sr. No. 4 below)	[Tick (✓) whichever is applicable] a) LC Equal to or more than 50% <input type="checkbox"/> b) LC More than 20% but less than 50% <input type="checkbox"/>
<b>4</b>	<b>Documents to be submitted by bidder under this Policy</b>	Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant as per Form-II to be submitted by bidder.
<b>5</b>	<b>Whether tender is divisible or not divisible</b>	Not Divisible; Clause No. 3A (c) of revised Policy dated 16.09.2020 shall be applicable

**UNDERTAKING ON LETTERHEAD**

To,  
M/s Talcher Fertilizers Limited

\_\_\_\_\_

SUB:  
TENDER NO:

Dear Sir,

We have read the Provisions for Procurement from a Bidder which shares a land border with India as per Annexure VI of Section-III. We certify that M/s .....(Name of Bidder)is:

- (i) Not from such a country [     ]
- (ii) If from such a country, has been registered With the Competent Authority. (Evidence of valid registration by the Competent Authority shall be attached) [     ]

(Bidder is to tick appropriate option (√ or X) above).

We hereby further certify that bidder M/s..... (Name of Bidder) fulfills all requirements in this regard and is eligible to be considered against the tender.

Place: [Signature of Authorized Signatory of Bidder]  
Name:

Date: Designation:  
Seal:

**CERTIFICATE FOR SUB-CONTRACTING OF WORKS**

To,

M/s Talcher Fertilizers Limited

\_\_\_\_\_

SUB:

TENDER NO:

Dear Sir,

We have read the Provisions for Procurement from a Bidder which shares a land border with India as per Annexure VI of Section-III. We certify that bidder M/s .....(Name of Bidder)will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.

Place:

[Signature of Authorized Signatory of Bidder]

Name:

Date:

Designation:

Seal:

**SECTION-IV**

**GENERAL CONDITIONS OF CONTRACT**

## **GENERAL CONDITIONS OF CONTRACT – CONSULTANCY**

### **ARTICLE 1: DEFINITIONS AND INTERPRETATIONS**

In this Document, as hereunder defined, the following terms and expressions shall have the meaning hereby assigned to them except where the context otherwise requires:

**AGREEMENT** means the agreement concluded on non-judicial stamp paper between TFL and PMC for Services as per this Bid document.

**TFL/OWNER** shall mean Talcher Fertilizers Limited and shall include their, heirs, legal representatives, successors and permitted assigns.

**TFL'S REPRESENTATIVE** means the person appointed or authorized from time to time by TFL for execution of the contract.

**CONSULTANT** shall mean Projects & Development India Limited (PDIL) retained by OWNER for Talcher Project.

**PROJECT MANAGEMENT CONSULTANT (PMC)** shall mean Railway Siding Project Management Consultant for providing consultancy services for “Detailed Engineering, Project Management and Construction/Execution of new Railway siding” as detailed in Technical Scope of work

**ENGINEER-IN-CHARGE (EIC)** shall mean the person designated from time to time by PDIL and shall include those who are expressly authorized by him to act for and on his behalf for operation of this CONTRACT.

**SIGN OFF** means a recorded statement for completion of a milestone/major activity by PMC as envisaged in this document and accepted by PDIL/TFL.

**CONTRACT** shall mean Letter of Acceptance and all attached exhibits and document referred to therein and all terms and conditions thereof together with any subsequent modifications thereto.

**SERVICES** mean the duties to be performed and the services to be rendered by PMC according to the terms and conditions of the Contract.

**HEADINGS** the headings appearing herein are for convenience only and shall not be taken in consideration in the interpretation or construction of the Contract.

**SINGULAR AND PLURAL WORDS** importing the singular only also include the plural and vice-versa where the context requires.

### **ARTICLE 2: PERFORMANCE OF DUTIES AND SERVICES BY PMC**

2.1 PMC shall perform its Services in full accordance with the terms and conditions of the Contract and any applicable local laws and regulations and shall exercise all reasonable professional skill, care and diligence in the discharge of said Project work.

PMC shall in all professional matters act as a faithful advisor to PDIL/TFL, and will provide all the expert commercial/technical advice and skills which are normally required for the class of Services for which it is engaged.

PMC, its staff, employees shall carry out all its responsibilities in accordance with the best professional standards.

PMC shall prepare and submit documents /reports etc. in due time and in accordance with the Tender Conditions.

- 2.2 PMC will maintain for the performance of the Contract, personnel as determined to be responsible for carrying out this job and such persons shall not be replaced or substituted without written approval of TFL.

### **ARTICLE 3: PDIL/TFL'S REPRESENTATIVE**

- 3.1 PDIL/TFL shall nominate its Representative(s) who shall be entitled to act on behalf of PDIL/TFL with respect to any decision it is empowered to make. The bill / invoice of PMC will be certified for payment by such representatives.

### **ARTICLE 4: PMC'S REPRESENTATIVE**

- 4.1 PMC shall nominate a qualified and experienced person as its Representative who will be the contact person between PDIL/TFL and PMC for the performance of the Contract. This nomination shall be done within ten (10) days after the coming into force of the Contract. PMC shall notify PDIL/TFL in writing prior to the appointment of a new representative. PMC's Representative may be replaced only with PDIL/TFL's consent after getting approved his CV's from PDIL/TFL.

PDIL/TFL shall be at liberty to object to any nomination and to require PMC to remove PMC's representative for good causes. PMC shall replace immediately such person by competent substitute at no extra cost to TFL.

- 4.2 PMC's Representative shall be entitled to act on behalf of PMC with respect to any decisions to be made under the Contract.

### **ARTICLE 5: Deleted**

### **ARTICLE 6: Deleted**

### **ARTICLE 7: CONFIDENTIALITY**

- 7.1 PMC shall treat all matters in connection with the Contract as strictly confidential and undertakes not to disclose, in any way, information, documents, technical data, experience and know-how given to him by TFL/PDIL without the prior written consent of the latter.
- 7.2 PMC further undertakes to limit the access to confidential information to those of its employees, Implementation Partners who reasonably require the same for the proper performance of the Contract provided however that PMC shall ensure that each of them has been informed of the confidential nature of the confidentiality and non-disclosure provided for hereof.

### **ARTICLE 8: TAXES AND DUTIES**

- 8.1 PMC shall pay any and all taxes including service tax, duties, levies etc. which are payable in relation to the performance of the Contract. The quoted price shall be inclusive of all such taxes and duties.

8.2 Statutory variation in taxes (CST, LST, WCT, withholding tax, service tax etc.) and duties, if any, within the contractual completion period shall be borne by TFL. No variation in taxes duties or levies other than statutory taxes & duties shall be payable.

8.3 PMC will not claim from TFL any taxes paid by him.

8.4 TFL shall deduct Income tax at source at applicable rates.

## **ARTICLE 9: RESOLUTION OF DISPUTES / ARBITRATION**

9.1 TFL/PDIL and PMC shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the Contract.

9.2 All disputes, controversies, or claims between the parties (except in matters where the decision of the Engineer -in-Charge is deemed to be final and binding) which cannot be mutually resolved within a reasonable time shall be referred to Arbitration by sole arbitrator.

TFL shall suggest a panel of three independent and distinguished persons to the other party (PMC) to select any one among them to act as the sole Arbitrator.

In the event of failure of the other party to select the Sole Arbitrator within 30 days from the receipt of the communication suggesting the panel of arbitrators, the right of selection of sole Arbitrator by the other party shall stand forfeited and TFL shall have discretion to proceed with the appointment of the sole Arbitrator. The decision of the TFL on the appointment of Sole Arbitrator shall be final and binding on the parties.

The award of the Sole Arbitrator shall be final and binding on the parties and unless directed/awarded otherwise by the Sole Arbitrator, the cost of arbitration proceedings shall be shared equally by the PARTIES. The arbitration proceeding shall be in English language and the venue shall be at New Delhi, India.

Subject to the above, the provisions of (Indian) Arbitration & Conciliation Act, 1996 and the rules framed there-under shall be applicable. All matters relating to this contract are subject to the exclusive jurisdiction of the Courts situated in the State of Delhi (India).

9.3 PMC may please note that the Arbitration & Conciliation Act 1996 was enacted by the Indian Parliament and is based on United Nations Commission on International Trade Law (UNCITRAL model law), which were prepared after extensive consultation with Arbitral Institutions and centres of International Commercial Arbitration. The United Nations General Assembly vide resolution 31/98 adopted the UNCITRAL Arbitration rules on 15 December 1976.

## **ARTICLE 10: LEGAL CONSTRUCTION**

10.1 Subject to the provisions of this Article, the Contract shall be, in all respects, constructed and operated as an Indian Contract and in accordance with Indian Laws as in force for the time being and is subject to and referred to the Court of Law situated at New Delhi.

## **ARTICLE 11: SUSPENSION OF THE PERFORMANCE OF DUTIES AND SERVICES**

11.1 TFL/PDIL may suspend in whole or in part – the performance of services of PMC any time upon giving not less than fifteen (15) days" notice.

- 11.2 Upon notice of suspension, PMC shall suspend immediately the services and reduce expenditure to a minimum to be agreed upon by both the parties.
- 11.3 Upon suspension of the performance of services, PMC shall be entitled to reimbursement of the costs which shall have been actually incurred prior to the date of such suspension. However, the total reimbursement shall be restricted to contract price.
- 11.4 By fifteen days prior notice, TFL/PDIL may request PMC to resume the performance of the services, without any additional cost to TFL.
- 11.5 In case of suspension of work by PMC on PDIL/TFL's request for more than 10 days, demobilization and remobilization charges will be paid to PMC as per Schedule of Rates.
- 11.6 If the suspension of the duties and services exceeds six months, either party shall be entitled to terminate contract according to Article 16 hereunder.

#### **ARTICLE 12: PRICE REDUCTION SCHEDULE (PRS)**

- 12.1 In case PMC fails to complete the services within stipulated completion period then unless such failure is due to force majeure as defined in Article 19 hereinafter or due to TFL's default, there will be a reduction in contract price @ 1/2% for each week of delay or part thereof subject to maximum of 5 % of Total Lumpsum Consultancy Fee.
- 12.2 TFL/PDIL may without prejudice to any methods of recovery, deduct the amount of such PRS from any money due or which may at any time become due to PMC from its obligations and liabilities under the contract or by recovery against the Performance Bank Guarantee. Both PMC and PDIL/TFL agree that the above percentage of price reduction are genuine pre-estimates of the loss/damage which TFL would have suffered on account of delay/ breach on the part of PMC and the said amount will be payable on demand without there being any proof of the actual loss/or damage caused by such breach/delay. A decision of TFL in the matter of applicability of price reduction shall be final and binding.

#### **ARTICLE 13: ASSIGNMENT**

PMC shall not have the right to assign or transfer the benefit and obligations of the contract or any part thereof to the third party without the prior express approval in writing of TFL which it shall do at its discretion. However, in event of that all legal/contractual obligations shall be binding on PMC only.

#### **ARTICLE 14: INDUSTRIAL AND INTELLECTUAL PROPERTY**

- 14.1 In order to perform the services, PMC must obtain at its sole account, the necessary assignments, permits and authorizations from the titleholder of the corresponding patents, models, trademarks, names or other protected rights and shall keep TFL harmless and indemnify TFL/PDIL from and against claims, proceedings, damages, costs and expenses (including but not limited to legal costs) for and/or on account of infringements of said patents, models, trademarks names or other protected rights.
- 14.2 All documents, report, information, data etc. collected and prepared by PMC in connection with the scope of work submitted to TFL/PDIL will be property of TFL.



14.3 PMC shall not be entitled either directly or indirectly to make use of the documents, reports given by TFL/PDIL for carrying out of any services with any third parties.

14.4 PMC shall not without the prior written consent of TFL be entitled to publish studies or descriptive article with or without illustrations or data in respect of or in connection with the performance of services.

#### **ARTICLE 15:LIABILITIES**

15.1 Without prejudice to any express provision in the contract, PMC shall be solely responsible for any delay, lack of performance, breach of agreement and/or any default under this contract.

15.2 PMC shall remain liable for any damages due to its gross negligence within the next 12 months after the issuance of the provisional acceptance certificate of the contract.

15.3 The amount of liability will be limited to 10% of the contract value.

#### **ARTICLE 16: TERMINATION OF CONTRACT**

##### **16.1 Termination for Default**

TFL/PDIL reserves its right to terminate / short close the contract, without prejudice to any other remedy for breach of CONTRACT, by giving one month notice if PMC fails to perform any obligation(s) under the CONTRACT and if PMC, does not cure his failure within a period of 30 days (or such longer period as TFL/PDIL may authorise in writing) after receipt of the default notice from TFL/PDIL.

##### **16.2 Termination for Insolvency**

TFL/PDIL may at any time terminate the CONTRACT by giving written notice without compensation to PMC, if PMC becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to TFL/PDIL.

##### **16.3 Termination for convenience**

TFL/PDIL may by written notice sent to PMC, terminate the contract, in whole or part, at any time for its convenience. However, the payment shall be released to the extent to which performance of work executed as determined by TFL till the date upon which such termination becomes effective.

#### **ARTICLE 17: MODIFICATION**

Any modification of or addition to the contract shall not be binding unless made in writing and agreed by both the parties.

#### **ARTICLE 18: CONTRACT/AGREEMENT**

The notification of award along with agreement on non judicial stamp paper of appropriate value as per proforma annexed within 10 days from the date of receipt of FOA (Fax of Acceptance) / DLOA (Detailed Letter of Acceptance), the cost of stamp paper is to be borne by PMC, and its enclosures shall constitute the contract between the parties and supersedes all other prior agreements,

arrangements and communications, whether oral or written, between the parties relating to the subject matter hereof.

#### **ARTICLE 19: FORCE MAJEURE**

Shall mean and be limited to the following:

- a) War/hostilities
- b) Riot or Civil commotion
- c) Earthquake, flood, tempest, lightening or other natural physical disaster.
- d) Restrictions imposed by the Government or other statutory bodies which prevents or delays the execution of the Contract by PMC.

PMC shall advise TFL/PDIL by a registered letter duly certified by the local Chamber of Commerce or statutory authorities, the beginning and end of the above causes of delay within seven (7) days of the occurrence and cessation of such Force Majeure Conditions. In the event of delay lasting over one month, if arising out of causes of Force Majeure, TFL reserves the right to cancel the Contract and the provisions governing termination stated under Article 16 shall apply.

For delays arising out of Force Majeure, PMC shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither TFL nor PMC shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exist.

PMC shall categorically specify the extent of Force Majeure Conditions prevalent in their works at the time of submitting their bid and whether the same have been taken into consideration or not in their quotations. In the event of any force majeure cause, PMC or the TFL/PDIL shall not be liable for delays in performing their obligations under this order and the completion dates will be extended to PMC without being subject to price reduction for delayed completion, as stated elsewhere.

#### **ARTICLE 20: RECTIFICATION PERIOD**

All services shall be rendered strictly in accordance with the terms and conditions stated in the Contract.

No deviation from such conditions shall be made without PDIL/TFL's agreement in writing which must be obtained before any work against the order is commenced. All services rendered by PMC pursuant to the Contract (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by TFL/PDIL) are guaranteed to be of the best quality of their respective kinds.

PMC shall rectify at his own cost any mistake in assumption of any data in the study or use of wrong data or faulty study observed within twelve months of the acceptance of his report and will submit the rectified report incorporating the changes wherever applicable within 30 days of observance of mistake.

#### **ARTICLE 21: SUB CONTRACT**

Any sub contract to be made by the PMC relating to the services shall be made only to such extent and with such duly qualified specialists and entities as shall be approved in writing in advance by TFL/PDIL. Upon the request of TFL/PDIL, the PMC shall submit for TFL's prior approval, the terms of reference or any amendment thereof for such sub contractor's SERVICES. Notwithstanding such

approval, the PMC shall remain fully responsible for the performance of services under the CONTRACT.

#### **ARTICLE 22: NOTICES**

21.1 Any notice given by one party to the other pursuant to the CONTRACT shall be sent in writing or by telegram or fax, telex/cable confirmed in writing.

21.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

#### **ARTICLE 23: ACQUISITION OF DATA**

If required, PMC shall be responsible for carrying out any surveys and acquisition of all data from necessary sources. TFL/PDIL, if requested in writing by PMC, may assist the PMC in the said acquisition by way of issue of recommendatory letters only. All requisite clearances, co-ordination, fees, charges, etc. and compliance to the local laws required for completion of the job shall be the responsibility of the PMC.

**SECTION-V**

**SPECIAL CONDITIONS OF CONTRACT**

## **INDEX**

1. GENERAL
2. TIME SCHEDULE
3. PAYMENT TERMS
4. PERFORMANCE GUARANTEE
5. PRICE REDUCTION SCHEDULE (PRS)
6. SUBMISSION OF FINAL BILL/ CORRESPONDENCE
7. PMC OBLIGATION
8. INSURANCE
9. LIABILITY OF GOVERNMENT OF INDIA
10. TERMS AND CONDITIONS

## **SPECIAL CONDITIONS OF CONTRACT (SCC)**

### **1.0 GENERAL**

- 1.1 Special Conditions of Contract shall be read in Conjunction with the General conditions of Contract, scope of Services and any other documents forming part of this Contract wherever the context so requires.
- 1.2 Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.
- 1.3 Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears, the provisions of the Special Conditions of Contract shall be deemed to override the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.
- 1.4 Wherever it is mentioned in the specifications that the PMC shall perform certain work or provide certain facilities, it is understood that the PMC shall do so at his cost and the value of contract shall be deemed to have included cost of such performance and provisions, so mentioned.
- 1.5 The materials, design, and workmanship shall satisfy the relevant Indian Standards, the Job Specifications contained herein and Codes referred to. Where the job specification stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.
- 1.6 It will be the PMC's responsibility to bring to the notice of Engineer-in-Charge any irreconcilable conflict in the contract documents before starting the work(s) or making the supply with reference which the conflict exists.
- 1.7 Any work, though not specifically detailed out in this document, but needed for effective completion of job shall also be deemed to be included in the scope of the PMC.
- 1.8 PMC shall perform the work promptly in an efficient, orderly and workmanlike manner and shall deploy necessary qualified and skilled persons according to the requirement of the work, enforce discipline and order among its employee and observe the safety and security instructions of Owner while operating at the site. Owner reserves the right to accept or replace the PMC Project Coordinator, site in charges or any other manpower depending upon the requirements.
- 1.9 Contract value/Contract price shall mean Total Lumpsum Consultancy Fee Quoted by the bidder for the complete scope of work

1.10 "Commissioning" shall mean putting the entire system in operation as defined in Technical Scope of work.

**1.11 Order of Precedence**

In case of an irreconcilable conflict between Indian or other applicable standards, General Conditions of Contract, Special Conditions of contract, Specifications, Drawings or Schedule of Rates, the following shall prevail to the extent of such irreconcilable conflict in order of precedence:

- (i) Detailed Letter of Acceptance along with Statement of Agreed Variations & its enclosures and any corrigendum/ addendum.
- (ii) Fax/ Letter of Intent/ Fax of Acceptance.
- (iii) Schedule of Rates as enclosures to Letter of Acceptance.
- (iv) Special Conditions of Contract.
- (v) Instructions to Bidders
- (vi) General Conditions of Contract
- (vii) Specifications, Special notes regarding specifications and Drawings, all three in conjunction with each other.

**2.0 Completion Period:**

The Completion Period for the above job shall not exceed 24 Months from the date of issuance of FOA. Completion shall mean Commissioning of the entire system.

PMC would prepare detailed activity schedule for the project in consultation with PDIL/TFL at the beginning/during kick-off meeting after award. All efforts should be made to meet all the intermediate schedule and milestones. PMC is required to plan and put manpower and resources accordingly. PMC is required to work simultaneously on various procurement & works packages and accordingly, make strong efforts to complete the project on or before this date. However, as per extant practices the project shall be monitored w.r.t internal schedule (Best effort Schedule) as well the deadline as indicated above.

**3.0 PAYMENT TERMS**

3.1 Payment terms will be as follows:

- 5% of the Total Lumpsum Consultancy Fee on unconditional acceptance of DLOA and kick of meeting subject to submission of 110% amount of Bank guarantee valid till completion period.
- 5% of the Total Lumpsum Consultancy Fee on issuance of tender for each package on prorata\* basis.
- 10% of the Total Lumpsum Consultancy Fee on recommendation for placement of award of contract for each package on prorata\* basis.

- 70% of Total Lumpsum Consultancy Fee on submission of Monthly invoices based on physical progress achieved during the previous month as per Project Schedule of various packages certified by EIC.
- 8% of the Total Lumpsum Consultancy Fee on commissioning of the entire system and approval from railway authority.
- 2% of the Total Lumpsum Consultancy Fee shall be paid on closure of Contract.

\* Weightage of each package will be decided in Kick off meeting with successful bidder after Award of Contract.

**Note:** Payment of any codal charges/Departmental fees/statutory charges etc., payable to relevant agencies while undertaking the construction of the Railway Siding Facility, are to be made by TFL on actual basis with recommendations to TFL/PDIL from PMC.

3.2 No variation on account of taxes and duties, statutory or otherwise, shall be payable by OWNER to PMC except for GST. However, any statutory variation for GST shall be payable up to the completion period mentioned above against documentary evidence. Any reduction in the amount of GST resulting from a reduction in the rate of GST or remission or exemption from GST with respect to Goods and Services provided to the TFL shall be refundable to the TFL at actual within the completion period and also during the delayed contractual completion period, if any.

3.3 Scope of Work to be completed on LUMPSUM basis.

3.4 In case of disputes concerning invoice(s), TFL shall return said invoice(s) to PMC within fifteen (15) days from its/their receipt specifying in writing the reasons for its /their rejection.

- i. TFL shall pay the undisputed amount of the invoice(s) according to Clause – 3.7 hereof.
- ii. The disputed amount, if any, shall be paid after mutual settlement between TFL/PDIL and PMC.
- iii. Total or partial rejection of the invoice(s) shall not release PMC from any of its obligations under the Contract.

3.5 **Mode of Payment:**

All Bills/Invoices of PMC shall be vetted by PDIL before payment thereof from TFL. PMC shall render all data/documents to the satisfaction of PDIL for enabling them to review & certify the Bills/Invoices as good for payment.

TFL shall pay for the services rendered as per stipulation in the tender through E-Banking only. All Bank charges of PMC's Bankers shall be to the PMC's account.

3.6 Payment shall be released within 45 days from the date of receipt of acceptance of invoice duly certified by EIC (Engineer-in-Charge) in Finance Department.



3.7 PMC shall enclose all documents as per check list issued by PDIL/TFL. After receipt of complete RA bill as per terms & conditions of the contract and duly certified by Engineer-in-charge (EIC)/PDIL, on account payment equivalent to seventy percent (70%) of the net payable certified amount of the RA bill will be released to the PMC within a period of seven (07) working days from submission of certified bill by PMC to TFL. The balance amount will be released within a period of 15 days from submission of certified bill by PMC to TFL.

3.9 Please note that the GSTN of Talcher Fertilizers Ltd., Noida is **09AAFCT8667A1Z3**.

### **3.10 PAYING AUTHORITY**

Director (Finance)  
Talcher Fertilizers Limited  
GAIL Training Institute  
Plot No. 24, Film City,  
Sector 16A,  
Noida – 201301

### **4.0 PERFORMANCE GUARANTEE**

Not applicable.

### **5.0 PRICE REDUCTION SCHEDULE (PRS)**

5.1 In case of delay beyond the scheduled Completion period, then unless such failure is due to force majeure as defined in clause 19.0 of GCC or due to PDIL/OWNERS's default, there will be a reduction in Consultancy Fees @ 1/2% for each week of Delay or part thereof subject to maximum of 5 % of Consultancy Fees (excluding GST).

5.2 TFL may without prejudice to any methods of recovery, deduct the amount of such PRS from any money due or which may at any time become due to PMC from its obligations and liabilities under the contract. Both PMC and TFL agree that the above percentage of price reduction are genuine pre-estimates of the loss/damage which TFL would have suffered on account of delay/ breach on the part of PMC and the said amount will be payable on demand without there being any proof of the actual loss/or damage caused by such breach/delay. A decision of TFL in the matter of applicability of price reduction shall be final and binding.

5.3 In case delay of in execution of contract, PMC will raise invoice for reduced value as per Price Reduction Clause. If PMC has raised the invoice for full value, then PMC will issue Credit Note towards the applicable PRS amount.

5.4 In case PMC fails to submit the invoice for reduced value or does not issue credit note as mentioned above, TFL will release the payment to PMC after effecting the PRS clause.

5.5 In the event of any financial implication arises on TFL due to issuance of invoice without reduction in price or non-issuance of Credit Note, the same shall be to the account of PMC.

### **6.0 SUBMISSION OF FINAL BILL/ CORRESPONDENCE**

6.1 The final bill complete in all respect shall be submitted after certified completion of work. The bill should be accompanied with the following documents:

- i. Job completion certificate.
- ii. No claim certificate on TFL"s prescribed proforma.
- iii. Site clearance certificate.

- 6.2 No claim shall be entertained after receipt of final bill. Settlement of final bill shall be made within 1 (one) month period subject to furnishing of all required documents /clarification and extension of time, if any, by TFL"s competent authority.
- 6.3 In case any claim with regard to the wages of any labour employed by PMC for the subject job is pending/ reported, TFL/PDIL shall be fully entitled to withhold payment of final bill pending finalization of such claims.
- 6.4 Invoice for payment against Work Order /Contract shall be addressed to PDIL/TFL. The WORK Order/Contract number shall be shown on all invoices and communications.
- 6.5 All correspondence from PMC shall be forwarded in duplicate (2 copies) to PDIL and 02 copies to Owner at following addresses:

PDIL(CONSULTANT)/ TFL( OWNER)

**PDIL**

Mr. R.N. Satyarathy  
Mob. : 09555445021  
E-mail:rnsatyathy@pdilin.com

**TFL**

Mr. Amit Singh,  
COO (U/S)  
Mob. : 09818070695  
E-mail: ak.singh@GAIL.CO.IN

**7.0 PMC OBLIGATION**

- a) PMC shall ensure payment of wages to the personnel employed and meet all statutory obligations of payment as per Minimum Wages act 1948 and payment of wages Act 1936.
- b) Special safety equipment e.g. safety belts, helmets, hand gloves, goggles, safety Shoes etc. shall be provided to the personnel engaged by the PMC.
- c) In case of accident, injury and death caused to the employee of the PMC while executing the Work under the contract, the PMC shall be solely responsible for payment of adequate compensation, insurance money etc. to the next kith & kin of injured / diseased. PMC shall indemnify TFL/PDIL from such liabilities.
- d) The PMC shall also undertake to obtain necessary group insurance coverage covering all risks connected with the job to be undertaken by him under the contract from insurance company and pay the premium accordingly.

- e) The PMC shall not employ or permit to be employed any person suffering from any contagious, loathsome or infectious disease. The PMC shall get examined his employees / persons deployed from a civil govt. doctor.
- f) No employees or person of PMC (including contractor) be allowed to consume alcoholic drinks or any narcotics within the plant premises. If found under the influence of above, the owner / TFL will terminate the contract immediately and may refer the case to police.
- g) The PMC hereby agrees to indemnify owner / TFL and harmless from all claims, demands, actions, cost and charges etc brought by any court, competent authority / statutory authorities against owner/TFL.

## **8.0 INSURANCE**

Necessary insurance(s) to cover accident risk for his employees loss of life, material etc. to crew or the third party to be arranged by PMC at his cost.

**9.0 Liability of Government of India:** It is expressly understood and agreed by and between Bidder or/PMC and M/s Talcher Fertilizers Limited, and that M/s Talcher Fertilizers Limited, is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Government of India is not a party to this agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that M/s Talcher Fertilizers Limited is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable Laws of India and general principles of Contract Law. The Bidder/ PMC expressly agrees, acknowledges and understands that M/s Talcher Fertilizers Limited is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, Bidder/PMC hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Government of India arising out of this contract and covenants not to sue to Government of India as to any manner, claim, cause of action or thing whatsoever arising of or under this agreement.

## **10.0 TERMS AND CONDITIONS**

- 10.1 The successful PMC shall submit the following documents for approval of the TFL after issuance of order:
- Organogram at Project HO & Site
  - Manning schedule
  - Project Schedule

Any changes to the above shall be intimated for TFL's approval. TFL reserves the right to seek changes in the team due to non – performance and other reason(s). In such cases, PMC shall provide to TFL another experienced personnel.

- 10.2 PMC shall take approval from TFL/PDIL before deploying the qualified and experienced personnel on its direct payroll. PMC shall also submit deploying employees.
- 10.3 PMC shall deploy adequate number of qualified and experienced personnel on its direct payroll, e.g. professional engineers, subordinate engineering personnel, etc. and other specialists of appropriate levels to ensure Quality in all stages and aspects as per best engineering practices, requirement of codes, standards, specifications, timely & expeditious

completion of the project and Economize project expenses. The team should be dedicated to TFL project.

- 10.4 PMC shall adhere to project schedule.
- 10.5 All recommendations related to Project shall be prepared by PMC after being duly reviewed and approved at requisite level at PMC's end and then the signed copy is to be forwarded to PDIL through covering letter. PMC to proceed further only after receipt of approval of recommendation from PDIL/TFL.
- 10.6 PMC shall be required to give presentations/ clarifications from time to time to PDIL/TFL, its Board, JV partners of TFL, Govt. agencies or other agencies/depts. as desired by TFL.
- 10.7 PDIL/TFL will assign the nodal persons for each package as mentioned in Scope of Work (Section-VI) of the Tender Document with whom PMC will coordinate for day to day activities.
- 10.8 PMC will prepare daily progress report of site activities, fortnightly report of the site activities and monthly report of Project to PDIL/TFL for analysis. The fortnight report to be submitted by forenoon of Tuesday of the relevant week and monthly report of respective month to be submitted by 05<sup>th</sup> of the succeeding month.
- 10.9 PMC to ensure that all the packages / plants as mentioned in Scope of Work are integrated properly and installed to the optimum capacities by the PMCs.
- 10.10 PMC shall perform the work under this CONTRACT with diligence and conforming to the best international practices available. Further, the PMC shall perform their obligations conforming to rules, regulations and procedures prescribed by law of the land.
- 10.11 PMC shall attend and provide its feedback in Review Meetings undertaken by PDIL/TFL, which shall be attended by the PMC's personnel at appropriate level.
- 10.12 PMC shall not without the prior written consent of TFL be entitled to publish studies or descriptive article with or without illustrations or data in respect of or in connection with the performance of services.
- 10.13 Performance Report of Vendors and PMCs shall be submitted to PDIL/TFL as per Tender Procedure provided by TFL/PDIL for all the packages envisaged in the Scope of Work (Section-VI) of the Tender Document.

**SECTION-VI**

**TECHNICAL SPECIFICATION/SCOPE OF WORK**

## A. Introduction

Talcher Fertilizers Ltd. (TFL), a joint venture company of four major Public Sector Units – M/s GAIL (India) Limited (GAIL), M/s Rashtriya Chemicals & Fertilizers Ltd. (RCF), M/s Coal India Ltd. (CIL) and M/s Fertilizers Corporation of India Ltd. (FCIL) is in the process of developing a world class coal based fertilizer complex at Talcher, Angul District, Odisha (India) consisting of Coal Gasification Plant, Ammonia and Urea Plant, along with other associated Offsite and Utility Plants.

M/s Projects and Development India Limited (PDIL) hereinafter referred to as CONSULTANT on behalf of M/s Talcher Fertilizers Ltd. (TFL), hereinafter referred as OWNER.

TFL has intended to set up a new Railway siding for Coal based Ammonia-Urea Plant (2200 MTPD Ammonia & 3850 MTPD Urea) for upcoming Talcher Fertilizer Project.

Tender is intended to be issued for Railway Siding Project Management Consultant (referred hereinafter as PMC for this tender) for providing consultancy services for “Detailed Engineering, Project Management and construction of new Railway siding including associated Electrical and Signalling & Telecommunications (S&T) system for Integrated Coal Based Ammonia –Urea Plant (2200 MTPD Ammonia & 3850 MTPD Urea) for upcoming Talcher fertilizer Project at Talcher, Angul District, Odisha (INDIA) near Talcher coalfields.”

The site is located at Vikrampur on the Cuttack – Sambalpur National Highway (NH-42), passing at about 8 km from the site. The nearest railway station is Talcher which is about 7Km from the site on Rajatgarh Jn and Talcher electrified section in Khurda Road Division of East Coast Railway. Talcher Railway Station is connected with Ananta Siding and Jagganath Colliery of MCL from with 03 lines (one each UP and DN with a common line).

Erstwhile lead line of FCIL which has been presently given to Global Coal Mining Private Ltd.(GCMPL) on lease for their siding takes off from north end shunting neck of Talcher station at Ch.848.868m from CSB of Talcher. The GCMPL siding takes off from the lead line at Ch.4436.193m from CSB/TLHR of the lead line. FCIL lead line is presently functional up to GCMPL siding. Beyond Ch.4436.174m from CSB/TLHR line is defunct now. Erstwhile FCIL siding will be Talcher Fertilizer Limited Siding (TFL).

M/s RITES were engaged for preparation of Feasibility Study Report (FSR) and Detailed Project Report (DPR) for TFL Railway siding project. As on date M/s RITES have completed FSR, which has been granted in-principle approval by Railways. DPR has also been completed by M/s RITES and is in process of getting approval from Railways.

The DPR submitted for approval to Railway is here with attached as **Annexure- I** for Reference. The approved DPR will be shared to **PMC** after approval receipt from Railway.

## Traffic projection

- The upcoming Fertilizer Plant broadly consists of Coal Gasification Unit, Ammonia Plant with design capacity of 2200 MTPD and Urea Plant with design capacity of 3850 MTPD along with associated facilities, including coal based captive power plant. The Traffic Projection will be as under:-

Traffic	Commodity	Source/Destination	Trains/Day
Inward Load	Coal	Talcher/ Nearby areas	3.50
	Lime Stone	Paradeep	0.27
	Pet Coke	Paradeep	0.27
Total (say)			4.00
Outward Load	Urea	Odisha, AP, MP, WB, Jharkhand	1.00
		Total	
Empty			5.00
G. Total			10.00

The anticipated traffic, month wise, to and from the Plant, as far as information collected are tabulated below:

Projected traffic per month							
Sl. No	Inward			Sl. No.	Outward		
	From Station	Commodity	No. of rakes		To Station	Commodity	No. of rakes
1.	Talcher	Coal	105	1.	Srikakulam	Urea	3
2.	Paradeep	Limestone	8	2.	Raipur	Urea	3
3.	Paradeep	petcoke	8	3.	Bilaspur	Urea	3
				4.	Ranchi	Urea	3
				5.	Talcher (throughout Odisha)	Urea	10
				6.	Bankura	Urea	3
				7.	Kolkata	Urea	3
				8.	Midnapur	Urea	3
Total			121	Total			31

- Talcher station, presently, serves a large No. of sidings and average No. of rakes dealt with per day at the station yard vary between 40 to 45 rakes, each way towards different

destination. With the commissioning of the upcoming Fertilizer plant railway siding, there will be a substantial increase of movement of additional 5-6 rakes, each way per day.

## **B. SCOPE OF WORK**

**1.0** PMC shall be responsible for the entire scope of work from planning to commissioning, getting the work executed through the “contractors” engaged for and on behalf of Owner and successful commissioning of Railway Siding and Signalling & Telecommunications (S&T) System including Associated Electrical & Mechanical System Package at TFL project, Talcher. The approximate total track length to be laid is 19 km and the total route length is 7 km.

The scope of work also includes all planning, supervision, inspection, co-ordination with Railway Authorities during testing and trials for commissioning of various sub-systems for Railway Siding as per terms & conditions specified in this document /agreed between PMC and TFL/PDIL.

**1.1** The scope of work of the PMC is broadly defined under the following heads but not limited to:

- a)** Design and detailed engineering shall be carried out as per Indian Railways/ RDSO guidelines.
- b)** Project Planning, scheduling, contract monitoring and reporting since commencement of works till final handover.
- c)** Safe and successful execution of the project by adhering to high standards of Engineering, Construction and Quality within time and cost.
- d)** Effective Project Interface Management.
- e)** Preparation of tender documents, invite bids /NIT of the identified works, evaluation of un-priced & price bids, recommendation for award of job and supply packages for Civil, Electrical and S&T etc works to various contractors for execution of the work in totality. The tendering activities shall be carried out as per Contracts & Procurement (C&P) procedure as provided by owner (TFL) for all purchases/services/works.
- f)** The PMC has to follow Preparation of Fax of Acceptance (FOA)/ detailed Letter of Acceptance (DLOA)/ Purchase orders, contract documents/ agreements.
- g)** Overall co-ordination with Railways, State and Central & all related Agencies involved in the project execution.
- h)** Overall project management including contracts handling, construction supervision, billing, certification, works/supplies handover, Contract closure etc.
- i)** PMC’s responsibility for Construction activities being carried out through various package Contractors shall be as under:
  - Supervision and inspections of all procurement and its installation such as Permanent way materials, plant and machinery, S&T, Electrical traction and other materials required for work at site including follow-up and timely receipt of all materials at Site.



- Construction management, Supervision including storage and handling for execution of all associated civil works including earthwork, permanent way, minor/major bridges, culverts, plant drains, Nallah crossings including laying of underground Hume pipes, overhead cables etc. Re-grading of roads, dismantling of existing built up structures along the proposed Railway Siding.
- Construction Supervision for dressing of the formation top, ballasting, track laying, erection of level crossings for complete Railway Siding System including testing and commissioning of tracks.
- Testing commissioning of various sub-systems including permanent way and Signalling & Telecommunications and transportation system of the Railway Siding.
- Make necessary arrangement with zonal railway for arranging the testing of Railway Siding system by bringing suitable locomotive and trailing lots, and shall obtain the fitness certificate from the competent authority of Railway and handover the same to M/s TFL as proof of satisfactory completion of work.
- Any other works related to the functioning of the upcoming new Railway Siding facility and obtaining all necessary approvals from Railways.
- Ensuring Compliance by all working agencies at site w.r.t. to safety, health and environment.
- Ensuring enforcement of Govt. latest Labor /HR policies by all Contractors at site.
- Execution of all service buildings (Cabins, offices, stores and staff quarters for maintenance staff, workshop building etc, if required during execution of the contract).
- During construction, maintaining with due justifications all records obstruction/ hindrances and intimation thereof from time to time.

- 1.2** All the above works shall be got executed by “PMC” in accordance with the design, technical specifications and drawings prepared by PMC and approved by Railways/ TFL/ PDIL and in line with the scope of work mentioned above.
- 1.3** The PMC shall be wholly responsible for any observations/comments/defects pointed out by C.T.E./ C.V.C./C&AG/ other investigating statutory bodies of GOI in the planning & procedures of award of Contract (s) for various activities related to Construction of Railway Siding System complete in all respect at TFL, Talcher.
- 1.4** The PMC shall co-ordinate at the site with all other agencies involved, including zonal Railways and local authorities for necessary clearances and approvals connected with the construction work.
- 1.5** The PMC shall also assist TFL/PDIL in all matters pertaining to the execution of the agreement with zonal Railways including preparation and finalization of the agreement.
- 1.6** The work towards shifting of HT/LT and other utilities shall not be in the scope of PMC. However, all technical assistance/supervision required shall be provided by PMC as and when required.
- 1.7** PMC shall prepare and submit to EIC weekly and monthly progress reports showing the progress and status of works being performed as per direction of EIC.PMC will also prepare weekly and monthly programs of planned work during the next period. The progress report shall include details such as financial and physical progress w.r.t. scheduled targets or milestones.

- 1.8 Prepare periodic payment status reports (monthly) against each Work Order / Packages.
- 1.9 PMC shall ensure preparation of QAP as per latest codes and standard.
- 1.10 Ensuring Quality Management compliance by all vendors / contractors involved during execution of the project.
- 1.11 The ownership of the entire work as mentioned in the bidder's scope shall rest with TFL/ PDIL.
- 1.12 In the event, Additional work/extra item/substituted items not covered in DPR if any for completion of Railway Siding work in all respect, PMC shall prepare necessary statements supported by appropriate justification and analysis of rates and take prior approval of TFL/PDIL before execution without any extra consultancy charges.
- 1.13 Deviations, extra items, AHR items, time extension, etc of the contractors are to be analyzed, and forward the recommendations with reasons for variation within 15 days of occurrence for approval of TFL/PDIL.
- 1.14 Any proposal for upward/downward revision of cost estimate indicated in DPR on account of change in scope, quantities, indicated in DPR or any other reason shall have reasoned vetting of TFL/PDIL. PMC (if required) shall prepare an updated NIT cost estimate for each package. The updated cost estimate for the purpose of NIT shall however be vetted by TFL/PDIL.
- 1.15 Preparation of accurate estimates in time (based on past data/ CPWD rate basis/ Market rate Analysis) for procurement of items, services and works is an important activity in Cost Engineering. Owner lays strong emphasis on accuracy of cost estimates and price difference between quoted price of L-1 bidder and estimated cost beyond ( $\pm$ ) 10% shall call for exhaustive analysis and explanation from the PMC. Deviation between cost estimates & recommended order value being more than (+/-) 10% not backed by justifiable reasons and beyond the control of PMC shall be treated as deficiency of services by PMC and an advisory will be issued to PMC highlighting such deficiency and for taking corrective action in future cases. Further, in case of the deviation between cost estimate provided by the PMC at the time of bid submission and recommended order value being more than ( $\pm$ )15 %, recovery will be made from the payment of PMC as follows:  
 If x: the actual awarded value of a particular package  
 X: the total awarded value of all the packages in the project  
 Then R (Recovery for that particular package) shall be:  
 **$(x / X) * (2\% \text{ of awarded PMC contract value})$**
- 1.16 Provision for recovery from PMC in case of substantial variation between awarded contract value and executed contract value "In case actual executed contract value is more than (+/-) 15 % of the awarded cost, PMC will be asked to furnish reasons for the same. If tender committee observes that such variation has taken place due to reasons solely attributable to PMC, such as

preparation of SOR without visiting site (s)/ work location (s) etc., recovery will be made from the payment of PMC as follows:

If x : the awarded value of a particular contract

X: the total awarded value of all the contracts in the project

Then R (Recovery for that particular contract) shall be:

**$(x / X) * (1\% \text{ of awarded PMC contract value})$**

- 1.17 PMC shall be responsible for all expenses incurred for their head office, site office and those in relation to technical co-ordination, procurement and its follow-up (All establishment expenses incurred by PMC for their head office and those in relation to technical co-ordination, Procurement and its follow-up including inspection by either PMC or any other agency appointed by PMC).
- 1.18 PMC shall be responsible for all expenses incurred for establishments including essential expenses related to accommodation, furnishing and maintenance of office.
- 1.19 PMC will initiate proposal for closure of contract with all relevant documents and submit the proposal to PDIL/TFL.
- 1.20 PMC shall ensure measurement of works and recording the same in the 'Measurement Book' and certification of 'Running RA bills' & 'Final bill' of Contractors for releasing payment.
- 1.21 PMC shall ensure revision/modification of drawing as and when necessary.
- 1.22 PMC shall ensure preparation of 'final bill,' 'As built' Drawing and all records on completion of construction works as well as material reconciliation statement for P-way, S&T & Electrical etc to be submitted to PDIL/TFL for closing of contract.
- 1.23 PMC shall ensure for conducting routine laboratory tests as per Specifications. If any.
- 1.24 PMC shall ensure for conducting progress review meeting at site level as well as HQ level with all executing agencies along with PDIL/TFL authority to achieve the completion schedule of the projects.
- 1.25 PMC shall furnish 3 sets of soft copies of all reports & as constructed drawing copies in CDs to TFL/PDIL.
- 1.26 The PMC shall get prepared the Operation and Maintenance (O&M) manuals for the complete Railway Siding facility of Talcher Fertilizers Limited.
- 1.27 Document to be submitted along with the bid – Registration certificate with East Coast railway zone. Failing to submit the above document will be liable to disqualify.

## **2.0 Commissioning:-**

Commissioning means testing & operation of individual Packages/Systems as applicable and final successful trial run of entire Railway Siding network/system followed by obtaining acceptance from the concerned Railway authority.

## **3.0 PMC Personnel**

- PMC shall depute to project site the required personnel along with necessary supporting staff as may be discussed and mutually agreed with Engineer-in-Charge at site. Further, PMC shall ensure that persons engaged for the work shall have proven integrity, competence and overall sound reputation.
- PMC shall submit within 15 days of award of contract a detailed schedule of deployment of manpower in all concerned areas.
- In the head office, PMC shall nominate a senior officer for this project who will coordinate with TFL/PDIL corporate office at New Delhi/Noida for progress and monitoring the work and shall visit site from time to time for guiding and coordinating the field activities. He will be assisted by necessary technical staff at the PMC headquarter office who are specialist in specified fields, such as earthwork, bridges, pre-stressed concrete work, track works, girder erection work etc., and will keep TFL/PDIL notified periodically about the person deployed at site for the work.
- PMC personnel when posted to the site shall abide by the general instruction as may be given by the respective Engineer-in-charge from time to time and shall not involve themselves in any local politics.
- TFL/PDIL reserves the right to request PMC for replacement of his personnel, if not found suitable by the Engineer-in-charge. PMC in all such cases will replace the person within a reasonable time up-to a maximum of thirty days.

## **4.0 PDIL Scope in Subject Assignment:**

- a) PDIL, on behalf of TFL, shall vet and approve the overall scheme, prepared by PMC.
- b) PDIL, on behalf of TFL, shall vet and approve all the drawings & documents technically generated and furnished by PMC.
- c) PDIL, on behalf of TFL, shall vet and approve the tender document including technical specification prepared by PMC before inviting tender.
- d) PMC shall execute the entire job under the supervisions of PDIL.
- e) PDIL shall vet and certify all bills / invoices of PMC before payment thereof from TFL.
- f) PMC shall render all documents / data to satisfaction of PDIL, enabling them to certify bills/invoices as "good for payment".

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# **TALCHER FERTILIZERS LIMITED**



## **DETAILED PROJECT REPORT**

### **FOR NEW RAILWAY SIDING FACILITY FOR**

### **TALCHER FERTILIZER LIMITED, TALCHER**

### **OF EAST COAST RAILWAY**

**SEPTEMBER' 2021**



**REGIONAL PROJECT OFFICE, KOLKATA**  
**56,C.R.AVENUE (2<sup>ND</sup> FLOOR)**  
**KOLKATA - 700 012**

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# CHAPTER – I

Introduction, concept of the study and traffic facilities, etc.

**CHAPTER – II**

**Civil Engineering**



**CHAPTER – III**

**Signal & Telecommunication**

# CHAPTER – IV

# Electrical Engineering

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**Operations & Maintenance of the Siding**

## CHAPTER – VIII

### Anticipated Cost of Railway Infrastructure

## PROJECT AT A GLANCE

Sl. No.	PARTICULARS	PARAMETERS
1.	Name of the Project	Preparation of FSR & DPR for new Railway siding facility for Talcher Fertilizer Limited at Talcher
2.	Name of Client	M/s Talcher Fertilizer Limited.
3.	Name of Zonal Railway	East Coast Railway
4.	Name of the Division	Khurda Road Division
5.	Quantity of commodities to be handled: a) Inward Traffic b) Outward Traffic	Per month basis Coal=105 rakes, Lime stone=8 rakes & Pet Coke=8 rakes Urea= 31 rakes
6.	No. of Trains per day for inward traffic	4 rakes per day
7.	No. of Trains per day for outward Traffic	1 rake per day
8.	Service Station	Talcher Station (Under Khurda Road Division)
9.	Nos. of Tiplers/Hopper for unloading	1 (ONE) each
10.	No. of platform lines for loading	2 (Line No.4 & 5)
11.	Take off point from	Ch:3079.227 m (F/CSB/TLHR)
12.	Length of siding	Track KM= 19.20 KM, Total Route length (including Y-connection) KM=6.585KM
13.	Maximum height of Bank	5.878 m
14.	Maximum depth of cutting	7.810 m.
15.	Gauge	B.G.1676 mm (5'6")
16.	Speed potential	25 KMPH
17.	Land	Necessary acquisition of land will be finalized on approval of ESP.
18.	Steepest Gradient	1 in 118.58
19.	Steepest Curve	Radius 220 m
20.	Minimum Track centre	6.0 M
21.	Sleeper density	1660 PSC Sleepers per KM
22.	Ballast Cushion	350 mm
23.	Rail Type	60 Kg/90 UTS T-12, Grade Prime Rail
24.	No. of Bridges	Tipler Line = 14, Y- connection = 04,
25.	No. of Road crossing/LC Crossings	Tipler line = 09, Y- Connection = 02
26.	No. of Power line crossings	Tipler line = 01, Y- Connection = 06
27.	Execution basic cost of the Project a) Civil Engineering b) S&T Engineering c) Electrical Engineering	Rs. In Lakh (a) Rs. 11488.65 (b) Rs. 2735.60 (c) Rs. 3797.71

## **EXECUTIVE SUMMARY**

- 1.0 Erstwhile, Talcher Unit of Fertilizer Corporation of India Ltd.(FICL) was set up in 1971 to produce Ammonia & Urea from 1980. However, due to obsolete & mismatch of technology, frequent power restriction and precarious steam balance the plant could not be sustained. Ultimately, in 1992, the Unit was closed.
- 2.0 In the year 2007, Government of India decided to revive all the units of FCIL to meet the growing demand for domestic Urea and approve the policy for new investments in the Urea sector in September'2008. In August'2011, the Cabinet Committee on Economic Affairs (CCEA) had approved the draft Rehabilitation Scheme (DRS) for revival of all the units of FICL and HFCL.
- 3.0 As envisaged in the DRS, "Talcher Fertilizer Limited' (TFL) was formed in 2014 to revive the Talcher Fertilizer Plant. A Joint Venture Agreement was also incorporated in Nov'2015.
- 4.0 TFL has decided to develop at the premises of closed Talcher Fertilizer units which will consists of Coal Gasification Plant, Ammonia & Urea Plant and a steam Generation Plant to be executed on LSTK/EPCM basis. Projects & Development India Limited (PDIL) was appointed as Consultant for providing Consultancy Services for selection of LSTK contractors and preparation of DFR.
- 5.0 Consequently, Regional Project Office, RITES, Kolkata has been entrusted by PDIL for consultancy services for preparation of "Feasibility Report" & "Detailed Project Report" for development of rail infrastructure facilities to deal with the projected traffic from the Fertilizer Plant. In response, offer for Consultancy services was rendered to PDIL vide GM/P/RITES's letter No. RITES/RPO-KOL/Market/Vol.51/2018/3691 dated 19.11.2018.
- 6.0 Necessary "Bid Documents" against Tender No.TFL/PROJ/C&P/RAILWAY/2019/SMD dated 26.04.2019 was submitted by RITES to TFL authority vide RITES letter No. RITES/RPO-KOL/PDIL/Talcher/2019/1370 dated 02.05.2019 and LOA for undertaking the work was issued by Sr. Engineer(C&P)/TFL vide his letter No.TFL/NOIDA/PROJ/RAILWAY/LOA-007/19-20 dated 30.05.2019.
- 7.0 A joint site survey along with the officials of PDIL,TFL & RITES was conducted on 11.06.2019. In terms of the decision taken during joint survey, a discussion plan showing two alternative alignments of the proposed siding was prepared and submitted to AGM(Mech.), PDIL.
- 8.0 A joint meeting was conducted in RITES office on 11.09.2019 with PDIL and TFL. The above discussion plan was critically examined and as per decision another 2 alternative discussion plans were prepared and submitted to PDIL.
- 9.0 The acceptance of the discussion plan was communicated by ACE,PDIL, vide his e-mail dated 05.11.2019 and based on this plan, a draft Feasibility Study Report for the project was prepared and submitted to AGM(Piping)/PDIL, NOIDA vide RITES letter No. RITES/RPO-KOL/TFL/2019/3505 dated 29.11.2019 for acceptance.
- 10.0 On examination of the draft FSR, ACE/PDIL has furnished some comments for inclusion in the feasibility Report. A discussion was held on 13.12.2019 between RITES & PDIL and PDIL advised to submit the FSR to Railway in compliance of the comments vide their e-mail dated 19.12.2019.
- 11.0 The FSR has been formulated and submitted on 27.12.2019 to CTPM/ECOR/BBS after duly compliance of all the comments/observations of PDIL. Further, in compliance with the MoM during meeting against the representatives of ECoR & M/s.TFL and their consultants PDIL & RITES held on 07.01.2020 in connection with FSR. The FSR has been revised and a modified plan of TFL siding has been prepared after duly considering all the points raised in the above mentioned MoM and submitted to Railway to CTPM/ECOR/BBS on 11.12.2020 vide RITES letter No. RITES/RPO-KOL/FR&DPR/TFL-Talcher/2020/2859 dated 11.12.2020.



- 12.0 After going through the submitted FSR and after interaction with M/s.TFL and M/s. RITES, the said revised FSR was accorded "IPA" by the competent authority vide Sr.DOM/ECOR/KUR's letter No.PL 3/Siding/TFL/FSR/TLHR/21 dated 21.05.2021 subject to some observations.
- 13.0 The Upcoming Fertilizer Plant broadly consists of Coal Gasification Unit, Ammonia plant and Urea plant including coal based captive power plant. Inward traffic of 4 rakes per day of Coal, Lime Stone and Pet Coke are anticipated for unloading through Wagon Tippler/Track hopper. On the other hand the outward traffic of 1 rake per day of Urea is also anticipated for loading through Platform on Line No. 4 & 5. One 140 Ton EIMWB has been proposed at Ch.3665.008 m (F/CSB/TLHR).
- 14.0 The proposed alignment of the siding will take off from the existing lead line of GCMPL siding. at Ch.3079.227 m (F/CSB/TLHR).
- 15.0 The infrastructures of loading facilities have been proposed in two lines (L/4 & L/5) having island platform of 660 m x 30 m. One engine reversal line and one brake van loop line will also be developed to have full-flagged operational flexibility. The alignment will terminate in the form of dead end buffer at Ch4175.997 m from the take off point.
- 16.0 Gauge for the proposed Railway network will be 1676 mm (5'6") Broad Gauge. Track structure as per IRPWM has been considered with 60 Kg LWR Rail, PSC sleepers with density of 1660/KM having ballast cushion of 350 mm.
- 17.0 Signaling with LED to be operated from E.I. at Junction Cabin near "Y" connection. Train operation between Talcher and Junction Cabin will be controlled by Absolute Block System of Working. The train operation between Junction Cabin and another E.I. Cabin of In-plant yard will be controlled by means of single line UFSBI arrangement with LED lit main signals.
- 18.0 Point to point communication facilities are proposed for smooth operation of train services.
- 19.0 The siding has been proposed to be electrified with 25 KV AC. It is proposed to provide 08 nos. of 30 m high masts for illumination of necks of the Railway yard.
- 20.0 The siding will be worked on EOL concept and the policies on "Liberalization of Siding Rules" as communicated vide Freight marketing Circular No. 11 of 2016 and duly modified vide FM Circular No.06 of 2020.
- 21.0 Cost of the project estimated to Rs 18021.96 Lakhs (Basic Cost). Abstract cost estimate for the entire rail infrastructures has been worked out on the basis of present day cost of Man and Materials.

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## CHAPTER-I

### Introduction, Concept of study, Traffic facilities etc.

#### 1.0 Introduction.

- 1.0.1 Erstwhile, Talcher Unit of Fertilizer Corporation of India Ltd. (FCIL), the first fertilizer unit in India to use coal-gasification technology, was set up in 1971 to produce ammonia & urea using coal as feed stock and commercial production commenced from November 1980. However due to obsolete & mismatch of technology, frequent power restriction and precarious steam balance the plant could not be sustained. Ultimately in 1992, the Unit was declared sick by Board for Industrial and Financial Reconstruction (BIFR) & Government of India (GOI), in 2002, initiated actions to close the Plant.
- 1.0.2 In the year 2007, GOI decided to revive all the units of FCIL to meet the growing demand for domestic urea and approved the policy for new Investments in the Urea Sector in September 2008 Empowered Committee of Secretaries (ECOS) was constituted in October 2008 with the mandate to evaluate all options for revival of closed Fertilizer units and to make suitable recommendations. In August, 2011, the Cabinet Committee on Economic Affairs (CCEA) had approved the Draft Rehabilitation Scheme (DRS) for revival of all the Units of FCIL and HFCL.
- 1.0.3 As envisaged in the DRS, "Talcher Fertilizers Limited" (TFL), a consortium of four state-run companies, e.g.; GAIL (India) Limited (GAIL), Coal India Limited (CIL), Rashtriya Chemicals & Fertilizers Limited (RCF) & Fertilizer Corporation of India Limited (FCIL) with 29.67%, 29.67%, 29.67% and 10.99% of share capital respectively was formed in December 2014 to revive the Talcher Fertilizer Plant. A Joint Venture Agreement was also signed among the consortium on 27<sup>th</sup> October, 2015 and the Joint Venture Company (JVC) was incorporated with RoC, Cuttack on 13<sup>th</sup> November 2015
- 1.0.4 TFL has decided to develop at the premises of closed Talcher Fertilizer unit a world class coal based Fertilizer Complex which will consists of Coal Gasification Plant, Ammonia & Urea Plant and a Captive Power Plant to be executed on LSTK / EPCM basis. Projects & Development India Limited (PDIL), a Mini Ratna, Category-I, GOI Undertaking under Department of Fertilizers, was appointed as Consultant for providing Consultancy Services for selection of LSTK Contractors and preparation of DFR which has been duly approved by TFL on 27.10.2017.
- 1.0.5 Consequently, Regional Project Office, RITES, Kolkata has been entrusted by TFL for consultancy services for preparation of Feasibility Report & Detailed Project Report for development of necessary rail-infrastructure facilities to deal with the projected traffic from the Fertilizer Plant.

## 1.1 Location of the Project

1.1.1 The proposed project will be coming up within the existing premises of closed Fertilizer plant of Talcher unit in Angul district of Odisha, near the Talcher Coalfields. The site is located at Vikrampur on the Cuttack – Sambalpur National Highway (NH-42), passing at about 8 km from the site. The nearest railway station is Talcher which is at about 7 km from the site, on the Rajathgarh Jn. and Talcher electrified section in Khurda Road Division of East Coast Railway.

## 1.2 Scope of works

1.2.1 The scope of works, as indicated in the LOA & Tender papers issued by PDIL authority, are indicated below:-

### (A) Stage-I: Feasibility Study & Reconnaissance Survey:

- (a) General Reconnaissance survey of the area and site for finalizing a technically feasible and cost effective alignment for the proposed siding in consultation with the project officials of PDIL /TFL;
- (b) To study for the layout of the erstwhile serving station yard to find out necessity of modification, if any required, to cope up with the additional train movement to and from the proposed siding;
- (c) To study the quantum of projected traffic from the proposed siding to develop the rail alignment of the proposed siding;
- (d) To carry out Preliminary Engineering Survey to develop a conceptual scheme and 'discussion plan' for submission to PDIL / TFL along with a 'Brief Report for acceptance of the same;
- (e) To prepare Civil Engineering layout plans, on acceptance of the 'discussion plan', for the proposed rail infrastructure in scale 1:2500 horizontal and 1:500 vertical or any suitable scale applicable for preparation of the layout plans;
- (f) To study for Signaling & Telecommunication arrangements for the proposed siding as well as at the serving station to deal with the anticipated traffic;
- (g) To prepare abstract cost estimates for Civil Engineering, S&T and Electrical (TRD & General services) works separately for development of the loading yard;
- (h) To prepare & submission of draft Feasibility Report to PDIL / TFL for approval;
- (i) Preparation of Feasibility Report incorporating the scope of works as mentioned in item No (a) to (h) for submission to both PDIL / TFL and E. Co. Railways to obtain in principle approval.

**(B) Stage-II: Preparation of ‘Detailed Project Report’, which includes:-**

- (a) To carry out Final Location Survey of the selected alignment of Railway infrastructure with due compliance of the observation, if any, made on the Feasibility Report and fixing of the concrete pillars on the ground at appropriate interval along the alignment;
- (b) To obtain cross sectional level of the proposed alignment to ascertain the earth work quantities for preparation of detailed cost estimates;
- (c) To prepare general arrangement drawings (GAD) of the bridges, Road Over Bridge/ Road Under Bridge / Level Crossing gate etc., if any;
- (d) To prepare detailed layout plan and Long Section in scale 1:2500 horizontal and 1:500 vertical or any suitable scale, as may be necessary;
- (e) To prepare Time Schedule required for execution of the Project;
- (f) To prepare detailed quantitative estimates based on the present day rates for Civil Engineering, S&T and Electrical (OHE & General services) works;
- (g) To prepare & submission of Detailed Project Report duly incorporating the observations of PDIL / TFL to Railway for approval;
- (h) Obtaining Railway’s approval on ‘Detailed Project Report’.

**1.3 Traffic projection**

1.3.1 The upcoming Fertilizer Plant broadly consists of Coal Gasification Unit, Ammonia Plant with design capacity of 2200 MTPD and Urea Plant with design capacity of 3850 MTPD along with associated facilities, including coal based captive power plant.

As per discussion in the meeting held on 24.12.2019 & on 07.01.2020 the Traffic Projection will be as under:-

Traffic	Commodity	Source/Destination	Trains/Day
Inward Load	Coal	Talcher	3.5
	Lime Stone	Paradeep	0.27
	Pet Coke	Paradeep	0.27
<b>Total</b>			<b>4.0</b>
Outward Load	Urea	AP, MP, WB, Jharkhand	1.0.
<b>Total</b>			<b>5.0</b>
Empty			5.0
<b>G.Total</b>			<b>10.0</b>

The anticipated traffic, month wise, to and from the Plant, as far as information collected are tabulated below:

Projected traffic per month							
Sl. No.	Inward			Sl. No.	Outward		
	From Station	Commodity	No. of rakes		To Station	Commodity	No. of rakes
1.	Talcher	Coal	105	1.	Srikakulam	Urea	3
2.	Paradeep	Limestone	8	2.	Raipur	Urea	3
3.	Paradeep	Petcoke	8	3.	Bilaspur	Urea	3
				4.	Ranchi	Urea	3
				5.	Talcher	Urea	10
				6.	Bankura	Urea	3
				7.	Kolkata	Urea	3
				8.	Midnapur	Urea	3
<b>Total:</b>			<b>121</b>	<b>Total:</b>			<b>31</b>

1.3.2 Talcher station, presently, serves a large No. of sidings and average No. of rakes dealt with per day at the station yard vary between 40 to 45 rakes, each way towards different destination. With the commissioning of the upcoming Fertilizer plant siding there will be a substantial increase of movement of additional 5-6 rakes, each way per day. However Railway may decide about augmentation of rail-infrastructure facilities, if required, at Talcher.

#### 1.4 Concept of the Study

1.4.1 In response to a request from Additional Chief Engineer, PDIL, Noida intimating their intention for revival of erstwhile Talcher Fertilizer Plant and restoration of rail-infrastructure facilities, RITES' team were deputed for joint site visit along with other stake holders on 30.10.2018. It was intimated that PDIL has been engaged by TFL as consultant for the development of the project.

1.4.2 Later on, in reference to an e-mail from Additional Chief Engineer, PDIL, Noida, an offer for under taking consultancy services for preparation of Feasibility Report & Detailed Project Report and Project Management consultancy for construction of new Railway siding for upcoming Talcher Fertilizer Plant was submitted to PDIL authority vide RITES' letter No. RITES/RPO-KOL/Market/Vo.-51/2018/3691 dated 19.11.2018.

1.4.3 Necessary 'Bid documents' against Tender No. TFL/PROJ/C&P/RAILWAY/2019/SMD dated 26.04.2019 was submitted by RITES to TFL authority vide RITES' letter No. RITES/RPO-KOL/PDIL/Talcher/2019/1370 dated 02.05.2019 and LOA for undertaking the work was issued by Sr.Engineer (C&P), TFL vide his letter No. TFL/NOIDA/PROJ/RAILWAY/LOA-007/19-20 dated 30.05.2019.

1.4.4 As decided by Additional Chief Engineer, PDIL a 'kick off' meeting was held at PDIL Bhawan, Noida wherein it was decided that RITES should depute Survey team by 11.06.2019 before submission of 'discussion plan' as per schedule of the LOI.

- 1.4.5 A joint site survey along with the officials of PDIL, TFL and RITES was conducted on 11.06.2019. In terms of the decision taken during the joint survey, a discussion plan showing two alternative alignments of the proposed siding was prepared and submitted to AGM (Mech), PDIL, Noida vide RITES' letter No. RITES/RPO-KOL/TFL/2019/ 2088 dated 11.07.2019. A copy of this letter is shown as **Annex-1.1**.
- 1.4.6 The above discussion plan was critically examined during the joint meeting, held at RITES' Kolkata office on 11.09.2019 with the concerned officials of PDIL and TFL. A copy of this MOM is shown as **Annex-1.2**.
- 1.4.7 According to the decision taken during the meeting a revised lay out plan, showing another 02 alternatives was developed and soft copy of the same was sent to AGM (Mech),PDIL by JGM/Civil,RITES through e-mail dated 18.09.2019. A copy of the e-mail dated 18.09.2019 is shown as **Annex-1.3**.
- 1.4.8 Acceptance of the "Discussion Plan" was communicated by ACE,PDIL vide his e-mail dated 05.11.2019,and based on this plan, a draft Feasibility Report for the project was prepared and submitted to AGM (Piping),PDIL, Noida vide RITES letter no. RITES/RPO-KOL/TFL/2019/3505 dated 29.11.2019 for acceptance of the same. A copy of the e-mail dated 05.11.2019 is shown as **Annex-1.4**.
- 1.4.9 On examination of the Draft FR, ACE/PDIL, vide his e-mail dated 06.12.2019 has furnished some comments for inclusion in the Feasibility Report. A discussion was held on 13.12.2019 between JGM (Civil),RITES and AGM(Mech. Piping),PDIL who vide his e-mail dated 19.12.2019 has advised to submit the Feasibility Report to Railway in compliance of the comments. Further clarification on the Civil Engineering Estimate were given by AGM(Mech. Piping),PDIL vide his e-mail dated 20.12.2019.A copy of the comments of PDIL is shown as **Annex-1.5**.
- 1.4.10 Consequently, the Feasibility Report have been formulated and submitted on 27.12.2019 vide RITES Letter No. RITES/RPO-KOL/TFL/2019/3808 27.12.2019 duly after compliance of all the comments/ observations of PDIL as indicated in para 1.4.9 above. **Annex-1.6**
- 1.4.11 Further, in compliance with the MOM during the meeting amongst the representatives of East Coast Railway & M/s Talcher Fertilizer and their consultants PDIL & RITES held on 07.01.2020 in connection with FSR of TFL/Talcher, the FSR has been revised and a modified plan of TFL siding has been prepared after duly considering all the points raised in the above mentioned MOM.(copy of the above MOM dated enclosed in the **Annexure- 1.7**.

Accordingly all plans & estimates have been revised which are enclosed herewith in the respective Annexure for further process.

1.4.12 Ultimately, the revised FSR was submitted to CTPM/ECOR/BBS on 11.12.2020 vide RITES Letter No. RITES/RPO-KOL/FR & DPR/TFL-Talcher/2020/2859 dated 11.12.2020. Copy of the letter is shown as Annex-1.8.

1.4.13 After going through the submitted FSR and after interaction with M/s.TFL and M/s. RITES, the said revised FSR was accorded “IPA” by the competent authority, vide CTPM/ECOR/BBS’s letter No.COM/Plg./BBS/TFL/TLHR/530 dated 18.03.2021 and Sr.DOM/ECOR/KUR’s letter No.PL 3/siding/TFL/FSR/TLHR/21 dated 21.05.2021. subject to the following observations. (Copy of CTPM/ECOR/BBS & Sr.DOM/ECOR/KUR’s letters are enclosed as **Annexure-1.9 & 1.10 respectively**).

1.4.14 The para wise compliance of the observations raised by DEN(Central)/ECOR/KUR, vide his letter No. Engg./Drg./Pvt. Sid./Genl/2/Pt.-XIV/42 dated 07.01.2021 is furnished below:-

Item. No.	Observations/Compliances & Remarks	
1.	Observations	It is noticed that existing GCMPL line is proposed to be regarded between Ch.4015.408 to 4379.477 towards In-Plant. As a result of that the existing track will be lowering by 186 mm which is not acceptable as the said track is on running condition and OHE is also exists there.
	Compliance	Necessary re-grading has been proposed with lifting of track (instead of lowering) to accommodate cross-overs on the basis of actual site survey.
2.	Observations	It is noticed that existing GCMPL line will proposed to be regarded between Ch.3029.00 m to 3480.00 m towards In-Plant. As a result of that the existing track will be rising by 971 mm and 941 mm between above chainage which is not acceptable as the said track is on running condition and OHE is also exists there.
	Compliance	Necessary re-grading has been proposed with lifting of track (instead of lowering) to accommodate cross-overs on the basis of actual site survey.
3.	Observations	It is noticed that most nos. of cross over are to be proposed between Ch.4537.973 m and Ch.5595.573 m in 1 in 200 grade towards In-Plant which is not acceptable as per SOD 2004, Chapter –II (Para-3).

	Compliance	Prop. Gradient has been revised and adopted as per IRSOD - 2004
4.	Observations	TPTC, TPCC should be mentioned in all the curves with speed.
	Compliance	Complied. Necessary transition length have been proposed as per layout. Accordingly, TPTC, TPCC etc have been incorporated with chainges.
5.	Observations	Distance of TFL junction Cabin from nearest track is to be mentioned in the ESP.
	Compliance	Since complied.
6.	Observations	Existing gradient of GCMPL line and UP- DN and 3 <sup>rd</sup> line towards TLSB are to be matched with latest approved ESP.
	Compliance	Existing gradient as per approved ESP is 1 in 201.88 which does not match with site. Necessary existing Rail level has been recorded by this end and the value of actual gradient as per site comes to 1 in 138.616. Accordingly, actual gradient has been mentioned and followed. As per latest guidance from Railway Board, siding line may be taken up from the gradient upto 1 in 100.
7.	Observations	The TP-I (C-6A) at Ch.5311.477 m F/CSB towards In –Plant is infringing the proposed PT at Ch.5281.477 m as per IRPWM Chapter-IV para-412.
	Compliance	As per guidance of Railway there should not be any change of super elevation within 20m of Back Leg of Crossing. In this case, curve no- 6A will be provided with super elevation more or less 5 to 10 mm on the basis of maximum speed 15Kmph. This is a no transition curve, accordingly, there will be no change of Super Elevation requires. Hence the tangent of non transition curve has been provided just after BLC.
8.	Observations	The TP-I (C-6B) at Ch.5480.673 m F/CSB towards In-Plant is infringing the proposed PT at Ch.5436.387 m as per IRPWM Chapter IV Para 412.
	Compliance	As per guidance of Railway there should not be any change of super elevation within 20m of Back Leg of Crossing. In this case, curve no- 6B will be provided with super elevation more or less 5 to 10 mm on the basis of maximum speed



		15Kmph. This is a no transition curve, accordingly, there will be no change of Super Elevation requires. Hence the tangent of non transition curve has been provided just after BLC.
9.	Observations	Proposed and existing land boundary should be clearly mentioned with dimension on either side of track.
	Compliance	Complied.
10.	Observations	SRJ and crossing over L C Gate at Ch.4184.967 m (1 in 160.03) towards Global In-Plant will not allowed due to maintenance problem. Hence, the cross over may be shifted suitably.
	Compliance	Corrected and shifted accordingly.
11.	Observations	Drawing is not legible. ESP should be prepared and print in 1:1000 scale.
	Compliance	Detailed Plan & Section has been prepared with scale 1 : 2500 for DPR but separate ESP will be submitted in scale of 1 in 1000 as per Railway practice.
12.	Observations	ORL should be 120 m instead of 75 m.
	Compliance	Agreed and corrected accordingly.
13.	Observations	Track structure should be mentioned in the ESP.
	Compliance	Track structure already mentioned in the ESP. However, the same is also re-submitted in the ESP along with DPR.

1.4.15 A meeting was conducted with M/s. Talcher Fertilizers Ltd. and M/s. RITES on 11.02.2021 to discuss the issues raised by Engg. regarding feasibility study. The points discussed in the meeting has already been complied.

1.4.16 CTPM/ECOR/BBS, vide his letter No.COM/Plg./BBS/TFL/TLHR/530 dated 18.03.2021 has communicated the In Principle approval to DRM/ECOR/KUR subject to the following observations. The para wise compliance of the observations raised by CTPM/ECOR/BBS is furnished below:-

Item. No.	Observations/Compliance & Remarks	
1.	Observations	No phasing of infrastructure.
	Compliance	Noted.

2.	Observations	After rake is dropped at Pre-Tipping yard at In-Plant siding, Side Arm Charger should be able to haul the loaded rake & no shunting by Railway engine.
	Compliance	The system of working has been given in details at para no. 1.9 of this chapter. However, if required, Railway Engine may be used for shunting purpose as per para No.6.1 of Freight Marketing Circular No. 05 of 2013 under EOL system.
3.	Observations	Compliance of divisional comments as communicated vide (v) of reference of the letter.
	Compliance	Compliance of divisional comments is given separately in the following para.
4.	Observations	Procedure & time line for private sidings as notified in FM circular 11 of 2016 & 06 of 2020 along with corrigendum issued from time to time are adhered to. Accordingly, para Nos. 4.15.1 & 5.0.2 of revised FSR of Dec'2020 are corrected while submitting DPR.
	Compliance	Noted and accordingly para No. 4.15.1 and 5.0.2 of revised FSR of Dec'2020 has been corrected in the submitted DPR.
5.	Observations	Deposit of Codal Charges by M/s. TFL @ 1 % of the total anticipated cost of the project & GST charges there to as per extant policy.
	Compliance	Noted for compliance.

1.4.17 Sr.DOM/ECOR/KUR, vide his letter No.PL 3/ Siding/TFL/FSR/TLHR/21 dated 21.05.2021 has communicated the In Principle approval to the GM/M/s.TFL subject to the following observations. The para wise compliance of the observations raised by Sr.DOM/ECOR/KUR is furnished below:-

Item No.	Observations/Compliance & Remarks	
1.	Observations	Compliance of observations as mentioned in HQ letter under reference
	Compliance	The compliance has been incorporated in para No.1.4.16 above.
2.	Observations	Compliance of Divisional observations as assured vide M/s. RITES letter No. RITES/RPO-KOL/FR & DPR/TFL-TLHR/20-21 dated 11.02.2021 and M/s.TFL 's letter No. TFL/NOIDA/Proj./Railway Siding/ ECoR/01 dated 12.02.2021
	Compliance	Noted for compliance.

1.4.18 Para-wise compliances of the comments raised by AGM(Mech)/PDIL, vide his letter No.PC150/PNPM-TFL/L/391 dated:16.09.2021 is furnished below:-

1.	Comments	PDIL's letter dated 19.11.2019 to be changed as 19.11.2018 on page No.2, Srl. No.5.
	Compliance	Corrected accordingly.
2.	Comments	Traffic projection to be included as per discussion during meeting with Railways on 24.12.2019 & 07.01.2020.
	Compliance	Complied.
3.	Comments	May please check the chainage of the proposed alignment of the siding will take off from the existing lead line of GCMPL siding at Ch.3770.893 m (F/CSB/TLHR)
	Compliance	Corrected as Ch.3079.227 m.
4.	Comments	RITES may explain third para of Srl. No.1.6.1 of Ch.3770.893.
	Compliance	Chainage of take off point has been corrected as Ch.3079.227 m.
5.	Comments	Para no. 1.9.3 (b) of page no.15 to be corrected as Loaded coal, Petcoke, limestone rakes shall be received either on Pre-Tipler line (Line No.1) or on Track Hopper Line (line No.3) according to type of wagon to be dealt with.
	Compliance	Complied.
6.	Comments	Para No. 1.9.5 of page No.16 to be corrected as Line No.04 & 05 are for handling Urea product only.
	Compliance	Rectified accordingly.
7.	Comments	Relocation of 2 Nos. 132 KV towers and shifting of existing 132 KV line from existing 132 KV switchyard.
	Compliance	Relocation of towers will be done by the owner of the towers on the basis of deposit work under supervision of RITES. Necessary correspondences regarding shifting will be made on approval of DPR.
8.	Comments	TFL should lift Conveyor belt at Ch.4189.508 m F/CSB- the Cost has been considered in the cost of DPR. RITES to give details of height to be lifted and other details. This are required for communications to NTPC.
	Compliance	Necessary information about lifting of the conveyor belt has

		been communicated to PDIL for estimation. Estimated value has been received by RITES vide e-mail on 21.09.2021 from Additional CE/PDIL. and the same is included in the detailed estimate.
9.	Comments	Why the different length from TFL plant to Talcher Railway Station is mentioned in Civil, S&T and Electrical report on para no. 2.0.1, 3.0.3 & 4.0.1 ?
	Compliance	The nearest Railway Station is Talcher which is about 7 KM from TFL. The same has been corrected in the concerned para of the report.
10	Comments	Track KM= 19.200 KM , Total Route length (including Y – connection) KM = 6.585KM
	Compliance	The Track KM and Route KM have been checked and found to be correct as Track KM = 19.200 KM and Route KM = 6.585 KM ( including Y connection).
11.	Comments	Indicate project cost and codal charges in separate tables in Annex 8.0
	Compliance	Complied.
12.	Comments	Gradient in siding platform area is 97.496 against 95.473 in FSR in ESP Annex 2.0 SH 3 of 4.
	Compliance	Gradient of the siding has been revised & corrected as per requirement of the client on discussion between TFL authority, PDIL and RITES.
13.	Comments	Doubling of track (Buffer line):Doubling of track is proposed in between Ch.1327.363 m /Ch.3154.227 m F/CSB Talcher (Neck of Y- leg Connection) upto Dead End at Ch.7395.579 m (F/L-1)
	compliance	Corrected.
14.	Comments	Mentioned In Phase-1 in para No. 3.1.1. There will be no phases.
	Compliance	Corrected.
15.	Comments	Mentioned In Phase-1 in para No. 4.1.1. There will be no phases.
	Compliance	Corrected.
16.	Comments	No slop is to be provided between Ch.5700 m and Ch.6420 m. Urea Bag loading platform area.
	Compliance	Proposed the platform on level

17.	Comments	In FSR, drawing No. RITES/KOL/TFL/Talcher, Sheet-3 of 3, formation level at Ch.5700 is 94.860 m and Formation level at Ch.6400 is 94.276 m in Urea bag loading platform. Whereas in drft DPR, formation level at Ch.5700 is 97.000 m and formation level at Ch.6400 is 96.394 m in Urea bag loading platform. Approximate 2.14 m level has been raised. This is not acceptable.
	Compliance	Levels and grade has been revised as per technical feasibility in consultation with PDIL and TFL authority.
18.	Comments	Scope of RITES -Rail for side arm charger shall be in RITES scope or not.
	Compliance	No.
19.	Comments	-Rail for wagon tippler shall be in RITES scope or not.
	Compliance	Approach track of the Tippler structure is under the scope of RITES.
20.	Comments	-Lifting of NTPC Conveyor atCh.4189.508 m
	Compliance	No, cost of the lifting of conveyer has been included in the estimate as received from PDIL.
21.	Comments	4 nos. Relocation of HT 132 KV lines in Y section area.
	Compliance	Relocation of towers will be done by the owner of the towers on the basis of deposit work under supervision of RITES. Necessary correspondences regarding shifting will be made on approval of DPR.
22.	Comments	At Track No.-5, Ammonia loading shall be done. RITES to take care RDSO as per Ammonia loading.
	Compliance	No specific Guidelines from RDSO is available in this office. However, necessary safety precautions should be taken during Ammonia Loading in the siding.
23.	Comments	RITES to inform that post-Tippler rail track shall be electrified with 25 KV line or not.
	Compliance	Post-Tippler rail track will be electrified with 25 KV line.
24.	Comments	Indication of In-motion weigh bridge shall be required in Bagging building control room and coal handling control room shall be interfaced with Urea bagging control room and coal handling control room.
	Compliance	Discussed with PDIL, Control Room will be constructed at

		<p>the opposite site of Proposed EIMWB. The indication of the In Motion Weigh Bridge may be available from different room/location connected with the main control building through optical fibre.</p>
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## 1.5 Existing Rail-infrastructure

1.5.1 Erstwhile lead line of FCIL which was presently been given to Global Coal Mining private Limited (GCMPL) on lease for their siding, takes off from north end shunting neck of Talcher station at Ch.848.868 m from CSB of Talcher. The GCMPL siding which consists of 03 lines takes off from the lead line at Ch.4436.193m from the take-off of the lead line.

1.5.2 The serving station, Talcher consists of the following lines (As per CE's Drg. No. SDG0013/13 (Sheet No. 1/3):

- (i) Line No.1 – Common loop of CAL 799.503m;
- (ii) Line No.2 – Common loop of CAL 724.190 m;
- (iii) Line No.3 – Up Main line of CAL 739.633m;
- (iv) Line No.4 – Down Goods line of CAL 789.840 m;
- (v) Line No.5 – Common Goods line of CAL 789.840m;
- (vi) LineNo.6 – Common Goods line of CAL 768.720m;
- (vii) Line No.7 – Common Goods line of CAL 745.320 m
- (viii) Line No.8 – Common Goods line of CAL 826.520m
- (ix) Line No.9 – Common Goods line of CAL 838.750m
- (x) Line No.10 – Common Goods line of CAL 853.350m;
- (xi) Line No.11 – Common Goods line of CAL 779.250m;
- (xii) Line No.12 – Common Goods line of CAL 779.250m.
- (xiii) Apart from above, the station is provided with (a) one high level island passenger platform in between line No.1 & 2, (b) one ARMV siding of CAL 150 m, (c) one ART siding of CAL546.375m,(d) two Sick lines of CAL204.000m & 599.110m,(e) one Tower wagon siding of CAL 161.713 m, (f) one Weighbridge siding of CAL 301.180 m, (g) one Fuel decanting line and (h) one Spur siding of CAL 192.000m.

## 1.6 Layout of proposed Fertilizer Plant yard

1.6.1 According to the latest revised plan as discussed in the para 1.4.11 above, the proposed Plant yard are being developed (considered Y-leg) with the consideration of both inward & outward rakes as described in paragraph 1.3.

According to latest proposed Plant Yard, the siding will take off from existing Dn. Main

Line of TLSB cabin in Khurda division of East Coast Railway at CH.3623.06 m (F/CSB of TLHR). (This point is reckoned at Zero CH for identification of onward locations of the proposed siding).

Another take-off from existing lead line (between Talcher Station and GCMPL Siding) at CH 3079.227 m and a cross over between existing lead line and proposed Y-Connection at Ch.3079.227m have been shown. All movement to & from new proposed TFL loading yard will be performed through this Y- Junction to both direction TLSB & TLHR station instead of previous proposed plan (i.e. one way Traffic movement).

1.6.2 The rail-infrastructure facilities which are proposed to be provided within the loading yard are indicated below:-

**PRE-TIPPLER YARD:**

- (a) Line No.1 – Pre-Tippler line of CAL 756.190 m (FM-SRJ)
- (b) Line No.2 – Engine Reversal cum Tippler By-pass line of CAL 604.731 m (FM-FM),
- (c) Line No.3 – Pre-Hopper line of CAL 820.692 m, a (FM-End of TH)
- (d) Line No.4- Platform Loading line of CAL 1088.611m (FM-FM)
- (e) Line No.5- Platform Loading Line of CAL 1057.639 m (FM-FM)
- (f) CL of Wagon Tippler at Ch.6216.277 m
- (g) CL of Track Hopper of 250 m long at Ch.6242.249 m
- (h) One Loading Platform (660 m x 30 m) in between L-4 & L-5.

**POST TIPPLER YARD**

- (a) Line No.1-Post Tippling Line of CAL 750.00 m(SRJ-SRJ)
- (b) Line No. 2- Engine Reversal cum Tippler By-Pass line of CAL765.670 m (FM-FM)
- (c) Line No.3- Post Hopper Line of CAL 794.271 m (FM-Start of TH)
- (d) Brake Van reversal line of CAL 75.00 m (FM-FM) adjacent to L-1 at the end of Post Tippler line.

In addition the following facilities are also proposed to be provided within the new Jn. Cabin and yard are indicated below:

- a) One holding of CAL 768.640 m (FM-DS)
- b) Another holding line of CAL 768.640 m (SRJ-FM)
- c) One over Run Line of CAL 120.00 m (SRJ-DE)
- d) One 140 Ton EIMWB are proposed to be provided at Ch.3665.008 m (F/CSB/TLHR)

1.6.4 Details of the Revised Engineering layout plan have been described in the Civil Engineering chapter of this report and an Engineering Scale Plan showing the proposed coal loading siding is shown as **Annex.2.0**

## **1.7 Signal & Telecommunication:**

- 1.7.1 It is proposed to provide one Centralized Electronic Interlocking (E.I.) cabin at a suitable place at Ch.5455.00 m (F/CSB TLHR) of the above new TFL loading yard for controlling trains movement with new TFL Jn. E.I.Cabin and also within the yard and another new Centralized electronic Interlocking (E.I.) Cabin as a TLF Jn. E.I.Cabin is proposed to be provided at a suitable place at Ch.3794.00 m (F/CSB/TLHR) for controlling trains movement with adjacent TLHR & TLSB cabin and with new TFL Loading Yard E.I. Cabin and also within the yard itself. In connection with 'Y' connection, necessary alteration to be done at TLHR & TLSB cabin.
- 1.7.2 Working of trains will be done through proper Signaling under 'Absolute Block System' and details of Signal & Interlocking are described in the Signal Engineering portion of this report.

## **1.8 Electrical Engineering:**

- 1.8.1 The proposed siding will be electrified by means of 25 KV AC traction matching with the traction of the adjoining sections with suitable arrangement of OHE isolation on the Wagon Tippler zone and loading platform lines.
- 1.8.2 The details of electrification are elaborated in the Electric Engineering chapter.

### **1.9 System of working:-**

- 1.9.1 Presently, GCMPL' siding which takes off from the lead line of erstwhile Fertilizer siding and provided with 03 ½ rake length lines is worked under Pilot Guard system. An empty rake meant for supply at the siding is stopped short of the facing point and placement is done on the two outer most lines, having the facility of loading platforms.
- 1.9.2 To achieve the target of traffic projection as per "Traffic Projection-1.3" and the flexibility of train movement of Y-connection (Bi-directional movement) has been considered in the proposed plan. Accordingly the Block section has been split up with provision of EI Junction cabin.
- 1.9.3 Following procedure shall be adopted for working of trains at the proposed TFL's siding:
- (a) A train meant for TFL's siding shall be dispatched either from TLSB or TLHR cabin on receipt of proper line clear by means of Universal Fail Safe Block Interface (UFSBI) from the Panel Operator of new TFL Jn. E.I. cabin. Train received at Y-Junction cabin from both siding simultaneously. Then the said train shall be dispatched from Y-junction cabin to TFL loading yard after receipt of proper line clear by means of UFSBI from panel operator of TFL loading yard



cabin by lowering of concerned Signals and the said train may be meant for GCMPL Siding. Panel Operator of Y-Junction cabin shall be dispatched by exchange of private number over telephone with M/s. GCMPL authority by lowering concerned shunt signal. After that the representatives of M/s. GCMPL siding may receive the train into the respective line of GCMPL Yard as per their requirement by pilot guard system. Outward movement will be done from GCMPL and from TFL siding accordingly.

- (b) Loaded coal, Petcoke, limestone rakes shall be received either on Pre-Tippler line (line No.1) or on Track Hopper line (line No.3) according to type of wagon to be dealt with;
- (c) A loaded rake after arrival at the 'Dummy Red Signal no.7' of Pre-Tippler line, the train engine with loaded rake will stop at the foot of the electric " Stop Board". The pento of front Loco will be lowered and the rear pento of rear Loco will be raised and draw ahead the loaded rake upto the point from where the Side Arm Charger is capable to pick up the front most wagon. After arriving the front Loco near Electric :Start Board", the front pento of front Loco will be raised and draw the rake ahead, then the train engine will be detached. During unloading operation, the loaded wagons will also be weighed simultaneously.
- (d) Wagons shall be unloaded one after another in the Wagon Tippler and the empty wagons will be collected on the Post-Tippler line. It should be ensured that all the empty wagons are coupled during the process of tipping;
- (e) After complete unloading at TFL loading Yard, the Brake Van shall be reversed by means of train engine and after readiness of the train the same will wait on line No.2 from where it will be dispatched on getting line clear from TFL Jn.E.I.cabin.

1.9.4 In case of BOBR rakes, after unloading at the Track Hopper in three batches, the train engine & Brake Van shall be reversed via line No.2 and utilization of Brake Van reversal loop. On readiness, the train will be dispatched in same way as applicable for BOXN rakes, released from Wagon Tippler.

1.9.5 Inward loaded rakes containing Coal, Lime stone & Pet coke will be dealt at line No.1 and 3, the empty rakes for out ward Urea traffic will be loaded from line No 4 & .5. In both the cases, the concerned rake will be directly received on the nominated line and the OHE shall be isolated, when required. After completion of loading / unloading, the rake shall be dispatched after reversal of Brake Van / Train Engine.

### 1.10 Commercial formalities

1.10.1 The siding will be commissioned and operative in terms of Railway Board’s Freight Marketing Circular No.11 of 2016 and modified thereof vide Freight Marketing Circular No.06 of 2020. The policy of ‘Engine-on-Load’ (EOL) scheme as incorporated in Freight Marketing Circular No.5 of 2013 dated 07.03.2013 shall be followed. The loading will be done within the specified free time for various types of block rakes as stipulated therein.

1.10.2 One new in-motion weighbridge to be provided on the modified brake van loop line at ch.3665.008 m just opposite of the existing GCMPL’s in motion weigh bridge on existing lead line at ch.3665.008 m as shown in the layout.

### 1.11 Carriage & Wagon requirements

1.11.1 As per latest policy instructions from IR, intensively examined empty trains are to be supplied for loading by IR and train should run on round-trip BPC. Hence, there will be no need for any maintenance facilities within the siding premises.

1.11.2 However, the costs of re-railing/restoration work, in case of any accident or derailment occurred owing to the fault of siding holder, will usually be borne by the Siding holder.

### 1.12 Cost Estimate

1.12.1 The Anticipated cost of the project has been worked out on the basis of prevalent cost of men & materials. Summary of cost, departmental wise is shown in the table below. The detail of cost estimate is shown in **Annex-8.0**.

Sl. No	Type of works	Anticipated cost [in lakhs of Rs.]
1.	Civil Engineering	<b>11488.65</b>
2.	Signal& Telecommunication	<b>2735.60</b>
3.	Electrical Engineering	<b>3797.71</b>
Total		<b>18021.96</b>

1.12.2 In addition to above, GST & other taxes/Cess, RLY charges, as applicable, are to be borne by the PDIL / TFL authority.

## CHAPTER-II

### CIVIL ENGINEERING

#### 2.0 Introduction

2.0.1 The proposed “Talcher Fertilizers Limited” project will be coming up within the existing premises of closed Fertilizer Plant of Talcher unit in Angul district of Odisha, near Talcher coalfields. The nearest railway station is Talcher which is about 7Km from the site on Rajatgarh Jn and Talcher electrified section in Khurda Road Division of East Coast Railway. Talcher Railway Station is connected with Ananta Siding and Jagganath Colliery of MCL from with 03 lines ( one each UP and DN with a common line).

Erstwhile lead line of FCIL which has been presently given to Global Coal Mining Private Ltd.(GCMPL) on lease for their siding takes off from north end shunting neck of Talcher station at Ch.848.868m from CSB of Talcher. The GCMPL siding takes off from the lead line at Ch.4436.193m from CSB/TLHR of the lead line. FCIL lead line is presently functional up to GCMPL siding. Beyond Ch.4436.174m from CSB/TLHR line is defunct now. Erstwhile FCIL siding will be Talcher Fertilizer Limited Siding (TFL) siding.

2.0.2 In the initial FSR **four** different alternative alignment were surveyed and studied as mentioned below:

**Alternative-1 and 2** were not considered due to non-availability of land.

**Alternative-3** was not considered due to close proximity of Urea Bags loading platform and coal unloading platform lines of Track Hopper and Wagon Tippler as there is high risk of contamination of urea by coal dust.

**Alternative-4** has been designed by shifting and distancing the loading lines of urea bags by 36 meter to avoid the mix up of coal and urea bags.

A joint discussion was held between EC Railway, TFL authorities and RITES on 07.01.2020 in the office of CTPM, E.C. Rly Bhubaneshwar. In the meeting, EC Railway specifically pointed out to provide a Y-Leg-Connection between the existing lead line and existing railway line in between Talcher and Ananta Siding/Jaggannath Colliery as coal are likely to be received from Ananta Siding/Jaggannath Colliery end and doubling of track in between GCMPL take off point and neck up of Y-leg connection.

After according “In Principle Approval” from the competent authority, the final location survey has been conducted and accordingly the final Engineering Scale Plan along with L-Section has been drawn and enclosed at Annex – 2.0.

## 2.1 Description of Alignment

Erstwhile lead line of FCIL (now proposed to be TFL) takes off from north end shunting neck of Talcher station at Ch.848.868m from CSB of Talcher.

**Y-Leg Connection:** A Y-Leg Connection arrangement is provided to connect proposed TFL line with the Dn main line of MCL towards Ananta Siding. The take off point for the Y-Leg connection has been taken from the Dn Main line at Ch.3710.02m F/CSB Talcher and reckoned as Ch.0.00 point. The Y-Connection leg will be meeting the proposed double line at Ch.2268.943m./Ch.4096.617m F/CSB Talcher.

**Doubling of Track (Buffer Line) :** Doubling of track is proposed in between Ch.3079.227m F/CSB Talcher (Neck of Y-Leg Connection) up to Ch. 4436.193 (F/TLHR).

**Take-off Point of the proposed alignment :** At Ch.3079.227m F/CSB Talcher the existing lead line will be going towards GCMPL Siding and at this point a take off point for a new line has been shown which will go parallel with the existing lead line at a track center of 6m and thereafter enter in to the upcoming TFL Plant . The GCMPL siding is taking off at Ch. 4436.193m F/CSB Talcher on the existing lead line.

### 2.1.1 Lay out of the proposed siding

The rail- infrastructure facilities which are proposed inside the plant yard are described below:

#### **PRE-TIPPLER YARD:**

- (a) Line No.1 – Pre-Tippler line of CAL 756.190 m (FM-SRJ)
- (b) Line No.2 – Engine Reversal cum Tippler By-pass line of CAL 604.731 m (FM-FM),
- (c) Line No.3 – Pre-Hopper line of CAL 820.692 m, a (FM-End of TH)
- (d) Line No.4- Platform Loading line of CAL 1088.611m (FM-FM)
- (e) Line No.5- Platform Loading Line of CAL 1057.639 m (FM-FM)
- (f) CL of Wagon Tippler at Ch.6216.277 m
- (g) CL of Track Hopper of 250 m long at Ch.6242.249 m
- (h) One Loading Platform (660 m x 30 m) in between L-4 & L-5.

#### **POST TIPPLER YARD**

- (a) Line No.1-Post Tippling Line of CAL 750.00 m(SRJ-SRJ)
- (b) Line No. 2- Engine Reversal cum Tippler By-Pass line of CAL765.670 m (FM-FM)
- (c) Line No.3- Post Hopper Line of CAL 794.276 m (FM-Start of TH)
- (d) Brake Van reversal line of CAL 75.00 m (FM-FM) adjacent to L-1 at the end of Post Tippler line.

In addition the following facilities are also proposed to be provided within the new Jn. Cabin and yard are indicated below:

- a) One holding of CAL 768.640 m (FM-DS)
- b) Another holding line of CAL 768.640 m (SRJ-FM)
- c) One over Run Line of CAL 120.00 m (SRJ-DE)
- d) One 140 Ton EIMWB are proposed to be provided at Ch.3665.008 m (F/CSB/TLHR)

An Engineering Scale Plan showing the proposed coal loading siding is shown as **Annex-2.0**

## **2.2 Survey Methodology**

2.2.0 In pursuant to the terms & conditions, as enumerated under scope of works, 'feasibility survey' has been conducted at site with the help of précised and latest survey instruments like Total Station & GPS, Digital level etc. by adopting modern survey methodology. Survey data downloaded in AUTO CAD format to arrive at the existing features of the alignment corridor.

2.2.1 Engineering plan along with L-section prepared with AUTOCAD and modern survey software. Original ground levels have been taken at suitable intervals of the existing laid alignment and the proposed alignment along with other facilities which have been incorporated in the layout plan.

2.2.2 Horizontal control points have been fixed along the laid out alignment in respect to fixed reference points to co-ordinates provided by TFL authority. Vertical control points have been fixed at suitable locations and the levels are connected with the mother Bench Mark of TFL by using "AUTO LEVEL".

## **2.3 Engineering Parameters**

2.3.1 **Gauge:** The gauge adopted for the proposed Railway siding line is Broad Gauge 1676 mm (5'-6"), i.e., the standard gauge of the serving Railway system from which the siding is proposed to be taken off.

2.3.2 **Fixed point:** For the proposed modification work the CSB Talcher is reckoned as fixed point of reference for chaining/measuring the length of the siding.

2.3.3 **Level:** All the levels are related with GTS Bench Mark at Inspection Bungalow (2.0m below ground level and the value is 89.938m . A list of Bench Marks is shown at **Annex-2.1**.

2.3.2 **Gradient:** Steepest gradient will be 1 in 118.58 as per the existing lead line.

A list of gradients and gradient abstract is placed at **Annex-2.2**.

2.3.4 **Curve:** Sharpest Curve is of Radius 220m. A list of curves and curve-abstract is shown in **Annex-2.3**.

2.2.5 **Speed potential:** The track structure of the siding as a whole will be suitable for movement of fully loaded rakes consisting of BOXN / BOBRN wagons like main line

tracks. Although, the track structure will suit to run a goods train on maximum permissible speed, considering it as a siding, the speed has been limited to 25 kmph subject to other speed restrictions over turnouts for points & crossings.

**2.2.6 Length:** The route length of the proposed line is 6.585Km and total track length is 19.200 Km.

**2.2.7 Formation:** Formation of the proposed alignment will pass through on filling. Formation in filling is designed to be made of mechanically compacted earth as per RDSO guidelines GE-G1-2003 with side slope 2H:1V(i.e.2Horizontal and 1 vertical). The width of single line formation is kept as 5.828 m in filling and 7.810m in cutting including side drains with side slopes 1H:1V(i.e. 1Horizontal and 1 Vertical) The formation when in filling and if filling height is more than 6m and when in cutting and if depth of cutting is deeper than 6.0m, berm width of 3m has been designed to be provided on either side of the embankment. The same procedure shall be followed in every successive height /depth of 6.0m. In formation, in case of clayey soil-a layer of 1000mm and in case of granular soil - a layer of 600mm thickness in filling zone a compacted layer of blanketing material of approved quality granular/stone dust is designed to be provided over the compacted earth work in formation in filling, conforming to RDSO guidelines. Side slope of embankment is designed to be grass turfed with approved quality and thickness. A cross slope of 1 in 30 on top of formation , both in filling and cutting zone is designed to be provided.

Loose soil/coal dust etc. dumped in between Ch.1500m to 1700m on tippler lines Line Nos.1,2 &3) and Ch.1420m to 1760m on loading/unloading lines (Line no.4&5) will require to be removed up to original ground level.

A typical profile of embankment and cutting is placed at **Annex-2.4**.

**2.2.8 Track Center:** Minimum 6.0m track center is proposed in between two tracks unless otherwise mentioned in the Engineering Plan.

**2.2.9 Track Structure:** The proposed railway track is designed to be laid on 60 kg/90 UTS, T-12 Grade, Prime Rails on new. PSC Mono block sleepers (T-2496) in straight and in curved alignment of radius less than 5° and in curves of radius above 5°, PSC Mono block sleeper (T-4183 to T-4186) with the provision of check rails. Sleeper density is proposed for 1660 nos. per kilometer over a layer of 350 mm thick machine broken stone ballast cushion. Points & Crossings will be of 60 kg rails along with curve switches, CMS crossings etc. on PSC sleepers with fan shaped layout. It is proposed for

1 in 8.5 Points & Crossings throughout the Track Structure. A detail of track structure is placed at **Annex-2.5**.

2.2.10 **Fixed Structure**:-All fixed structures are to be designed to comply with the fixed structure as indicated in the Schedule of Dimension for Broad Gauge of IR.

2.2.11 **Bridges/Culverts**: Altogether there will be 14 bridges out of which Existing Bridge No. 3,4 , 5, 6,& 7 on the lead line required to be extended; Existing Bridge No. 8,9,10,11 and 12 on the erstwhile lead line required to be dismantled and proposed to be built at new location. On the Y-Connection line, out of 04 nos of bridges, existing Br. No. 4A on the MCL line to be extended; at Ch.373.276 M. One RCC Box of span 6.65mX7.0m will be annexed with the existing Br.no.3 C (ROB) on the MCL line. A list of bridges is placed at **Annex.-2.6**

2.2.12 **Road Crossing/Level Crossing**: 04 Nos. C-Class Manned Level Crossings, 02 Nos. LHS & 01 no. RUB have been proposed inside plant area. 02 Nos of Road crossing are proposed in Y- connection out of which 1 is ROB and other is LC C-class Manned gate. The list is placed at **Annex.2.7**

2.2.13 **Power Line Crossing**: There will be 01 No. Power line crossing at Ch: 5276.571 m (to be modified) and 06 nos. of HT line Crossings (to be modified) are proposed in Y-connection. The list is shown in **Annex.-2.8**

2.2.14 **Loading/Unloading Platforms**: 02 (two) Nos. loading and unloading platforms have been proposed in between line No. 4 & 5 of size 660mX30m.

2.2.11 **Land**: The land on entire alignment belongs to TFL authorities. In Y-Leg connection the alignment encroaches in to MCL residential quarters from Ch:906m to 1050m.

2.2.12 **Weighment Facility** : In addition to existing Weigh Bridge of Global Mining Private Limited(GCMPL) at chainage 3665.008 from CSB of Talcher Rly. station one additional weighbridge at the same Chainage on the loop line has been proposed.

**2.5 Civil Engineering Cost**

SI No	Description	Estimated cost (Rs. in lakh.)
1.	Civil Engineering works	11488.65

## CHAPTER - III

### SIGNAL ENGINEERING & TELECOMMUNICATION

#### 3.0 Introduction:

- 3.0.1 M/s Talcher Fertilizers Limited (TFL) has Planned to develop one new Pvt. Railway siding for setting up an Ammonia-Urea Fertilizer complex near Talcher Railway Station.
- 3.0.2 The proposed fertilizer unit of TFL at Talcher will be situated at the location of about 5km of Talcher Railway Station of Khurda Road Division of East Coast Railway. The plant area is well connected both by Road and Rail.
- 3.0.3 The new siding line is proposed to be take off from existing lead line of FCIL given to lease to M/s GCMPL and another take off from existing Dn.Mn.Line between TLSB cabin & TLHR (Talcher) Cabin of ECoR and finally these two take off join to form a 'Y' junction, from where the siding line will go to TFL loading Yard for transportation of Fertilizer from their Amonia-Urea Fertilizer complex at a distance of about 7 km from Talcher Railway station of Khurda Road Division of East Coast Railway.

#### 3.1 Engineering layout:

- 3.1.1 The proposed revised new TFL loading Yard Pvt, Siding line will take off at Ch.3079.227M (F/CSB of TLHR) from existing lead line of FCIL given to lease to M/s GCMPL and another take off point of 'Y' from existing Dn. Mn. Line between TLSB cabin & TLHR (Talcher) Cabin of ECoR at Ch.3710.02 M F/CSB of Talcher Railway Station and finally meeting at a point of Ch.1327.363 M from Takeoff 'Y' of Dn. Main line of TLSB (Ch.3154.227m F/CSB of TLHR) to form a 'Y' Junction and from there, the proposed siding line will go to new TFL loading Yard Pvt. Siding.
- 3.1.2 The proposed new TFL loading Yard Pvt. Siding is a 5 line station along with a Brake Van Reversal line. & TFL Jn.cabin yard is a three line yard with two holding line at the both side of existing lead line.
- 3.1.3 Considering maximum numbers to and fro Signal movement from Talcher Railway Station (TLHR) and TLSB cabin in the 'Y' connection towards the TFL Loading yard, It is proposed to provide two nos new Centralized E.I.Cabin, one no. as TFL Jn.E.I.Cabin at app.Ch.3794.00 M F/CSB of TLHR and other is TFL Loading Yard E.I.Cabin (App.Ch.5455.00 M F/CSB of TLHR) to be located at a suitable place as shown in the attached schematic signaling plan.

TFL Jn.E.I.cabin controls the movement in the 'Y' connection from TLSB /TLHR cabin respectively and also towards TFL loading Yard E.I.Cabin.TFL Loading Yard E.I.cabin controls the movement with TFL Jn.E.I.cabin and within the yard itself.



3.1.4 The facilities which are proposed to be provided within the loading yard are indicated below in brief: **PRE-TIPPLER YARD**

- (a) Pre-Tippler Line (L-1) of CAL 756.190 M (FM-SRJ).
- (b) Engine Reversal cum Tippler Bypass Line (L-2) of CAL 604.731 M (FM-FM).
- (c) Pre-Hopper Line (L-3) of CAL 820.692 M (FM-End of TH).
- (d) PF Loading line (L-4) of CAL1088.611 M (FM-FM).
- (e) PF Loading line (L-5) of CAL1057.639 M (FM-FM).

**POST TIPPLER YARD**

- (f) Post Tippler Line (L-1) of CAL 750 M (SRJ-SRJ).
- (g) Engine Reversal cum Tippler By pass Line (L-2) of CAL765.67 M (FM-FM).
- (h) Post-Hopper Line (L-3) of CAL 794.376 M (FM - Start of TH).
- (i) One Brake Van Reversal Line adjacent to L1 of CAL-75M (FM-FM) at the end of post tippler line.
- (j) One Track Hopper of 250M long (C/L of Track hopper ch.6242.249m).
- (k) One Loading Island Platform (660m x 30m) in between L-4 & L-5.
- (l) One wagon Tippler (C/L of wagon tippler ch.6216.277m).

3.1.5 The facilities which are proposed to be provided within the new Jn.E.I.cabin yard are indicated below in brief:

- a) One no. Holding Line of CAL768.64 m (FM-FM).
- b) Another Holding Line of CAL 768.64 m (FM-DS).
- c) One no. Proposed 140 Ton IMWB at ch.3665.008 m F/CSB of TLHR on new holding line just opposite of existing lead line weigh Bridge.

3.1.6 The details of layout have been described in the relevant Para of Engineering Chapter of this report.

**3.2 Proposed Signaling arrangement:**

3.2.1 It is proposed to provide one Centralized Electronic Interlocking (E.I.) Cabin at a suitable Place (app.Ch.5455.00 M F/CSB of TLHR) of the above new TFL loading yard for Controlling trains movement with new TFL Jn.E.I.Cabin and also within the yard and another new Centralized Electronic Interlocking (E.I.) Cabin as a TFL Jn.E.I.Cabin to be provided at a suitable place (app.Ch.3794.00 M F/CSB of TLHR) for controlling trains movement with adjacent TLHR & TLSB cabin and with new TFL Loading Yard E.I.cabin and also within the yard itself . In connection with 'Y' connection, necessary alteration to be done at TLHR & TLSB cabin

- 3.2.2 The new E.I. cabin of TFL loading yard with new TFL Jn.E.I.Cabin and TFL Jn.E.I.Cabin with TLSB & TLHR cabin will control movement of trains to and from by means of single line UFSBI arrangement with LED lit Main signals as below;
- (i) Reception & despatch of trains between new TFL Loading yard E.I.cabin & TFL Jn.E.I.Cabin. and TFL Jn.E.I.Cabin with TLHR & TLSB cabin will be controlled by LED lit Main signals.
  - (ii) All Shunt Signals / Main signals will be provided with LED lit signals for better visibility.
  - (iii) Shunt signals will be provided for shunting operation within the new TFL loading yard E.I.cabin & TFL Jn.E.I.Cabin.
  - (iv) Points of New TFL Loading yard E.I.cabin & TFL Jn. E. I. Cabin will be provided with Electrical operation by means of IRS Type Electric Point Machine up to Ch.5513.307m from CSB of TLHR Station, **beyond that all points will be hand operated point as per schematic signaling plan.**
  - (v) Point zones and Signal to Signal berthing zone at new loading yard will be provided with Multi Section Digital Axle Counter (MSDAC) for proving of track clearance.
  - (vi) Crank Handles are to be provided for operation of the Point Machine manually in case of any motor operated point fails to operate by the Operating Panel / Console.
- 3.2.3 Data Loggers are to be provided for fault diagnosis, monitoring status of Power Supply, generating early warning of impending failures / unhealthy systems in both the new TFL Loading Yard E.I.Cabin & TFL Jn.E.I.Cabin.
- 3.2.4 SMPS based Integrated Power Supply ( IPS ) system are also to be provided for arranging reliable Power supply to the proposed signaling system in both the new TFL E.I.Cabin & TFL Jn.E.I.Cabin.
- 3.2.5 Provision of auto changeover has been catered for in the respective Electrical Engineering estimates for new E.I.cabin of TFL Loading Yard & TFL Jn.E.I.Cabin.
- 3.2.6 Maintenance free Ring Earth arrangements are proposed for protecting sophisticated equipment from high voltage surge at new E.I.cabin of TFL Loading Yard & TFL Junction E.I.Cabin.
- 3.2.7 Diesel Generator to be provided for stand-by power supply to signaling equipments at new E.I.cabin at TFL loading yard & TFL Junction E.I.Cabin.

**3.3 Proposed Telecommunication arrangement:**

3.3.1 Point to point communication facilities are proposed to be provided for smooth operation of train services between:-

- (a) New TFL loading yard & TFL Junction E.I.Cabin
- (b) New TFL Junction E.I.Cabin & TLHR & TLSB Cabin.
- (c) VHF sets are to be provided at both New TFL loading yard & TFL Junction E.I.Cabin.
- (d) Hand held Walkie-Talkie sets will also be provided for effective and reliable Communication at both New TFL loading yard & TFL Junction E.I.Cabin.

**3.4 System of Working:**

3.4.1 Train operation between the Block stations\Cabins is to be controlled by Absolute Block System of Working with approved means of Block Working as indicated below:-

Sl. No	Section	Means of Block working.
1	TFL Loading Yard E.I.Cabin – TFL Jn.E.I.Cabin.	By Single Line UFSBI with BPAC.
2	TFL Jn.E.I.Cabin – TLHR Cabin.	By Single Line UFSBI with BPAC.
3	TFL Jn.E.I.Cabin – TLSB Cabin.	By Single Line UFSBI with BPAC.

;

**3.5 Cost Estimate:**

3.5.1 Abstract Cost for S&T is worked out to **Rs. 2735.60 lakhs** excluding GST and other charges, details of which are placed at **Annex-8.2.0 to 8.2.4.**

**3.6 Sketch Plan:**

3.6.1 The Schematic Signaling Plan for the proposed signaling arrangement is placed at **Annex-3.1** for appreciation.

## CHAPTER- IV

### Electrical Engineering

#### 4.0 Introduction

- 4.0.1 Talcher Fertilizers Limited (TFL) have planned to transport Coal, Ammonia & Urea to different destinations by rail for which a Y connection rail connectivity between loading point and new siding of TFL taking off near cabin under Talcher Station and Y connection takeoff from Ch.3623.02 F/CSB(Ch.0.00), is proposed. The proposed fertilizer unit of TFL at Talcher will be situated at the location of about 7 km of Talcher Railway Station of Khurda Road Division of East Coast Railway. The plant area is well connected both by Road and Rail.
- 4.0.2 The new siding line is proposed to be take off from existing lead line of FCIL given to lease to M/s GCMPL and another take off from existing Dn.Mn.Line between TLSB cabin & TLHR (Talcher) Cabin of ECoR and finally these two take off join to form a 'Y' junction, from where the siding line will go to TFL loading Yard for transportation of Fertilizer from their Amonia-Urea Fertilizer complex at a distance of 5.45 km from Talcher Railway station of Khurda Road Division of East Coast Railway.
- 4.0.3 The proposed new TFL loading Yard Pvt. Siding is a 5 line station along with a Brake Van Reversal line.

#### 4.1 Scope of work.

- 4.1.1 The following rail infrastructure is proposed to handle above level of traffic:-  
The proposed revised new TFL loading Yard Pvt, Siding line will take off at Ch.3079.227M (F/CSB of TLHR) from existing lead line of FCIL given to lease to M/s GCMPL and another take off point of 'Y' from existing Dn.Mn.Line between TLSB cabin & TLHR (Talcher) Cabin of ECoR at Ch.3710.02 M F/CSB of Talcher Railway Station and finally meeting at a point of Ch.1327.363 M from Takeoff 'Y' of Dn.Mn. line of TLSB (Ch.3154.227m F/CSB of TLHR) to form a 'Y' Junction and from there, the proposed siding line will go to new TFL loading Yard Pvt. Siding.
- 4.1.2 The proposed new TFL loading Yard Pvt. Siding is a 5 line station along with a Brake Van Reversal line. & TFL Jn.cabin yard is a three line yard with two holding line at the both side of existing lead line.
- 4.1.3 The facilities which are proposed to be provided within the loading yard are indicated below in brief: **PRE-TIPPLER YARD**
- (a) Pre-Tippler Line (L-1) of CAL 756.190 M (FM-SRJ).

- (b) Engine Reversal cum Tippler Bypass Line (L-2) of CAL 604.731 M (FM-FM).
- (c) Pre-Hopper Line (L-3) of CAL 820.692 M (FM-End of TH).
- (d) PF Loading line (L-4) of CAL1088.611 M (FM-FM).
- (e) PF Loading line (L-5) of CAL1057.639 M (FM-FM).

#### **POST TIPPLER YARD**

- (a) Post Tippler Line (L-1) of CAL 750 M (SRJ-SRJ).
- (b) Engine Reversal cum Tippler By pass Line (L-2) of CAL765.67 M (FM-FM).
- (c) Post-Hopper Line (L-3) of CAL 794.376 M (FM - Start of TH).
- (d) One Brake Van Reversal Line adjacent to L1 of CAL-75M (FM-FM) at the end of post tippler line.
- (e) One Track Hopper of 250M long (C/L of Track hopper ch.6242.249m).
- (f) One Loading Island Platform (660m x 30m) in between L-4 & L-5.
- (g) One wagon Tippler (C/L of wagon tippler ch.6216.277m).

4.1.4 The facilities which are proposed to be provided within the new Jn.E. I. cabin yard are indicated below in brief:

- a) One no. Holding Line of CAL768.64 m (FM-FM).
- b) Another Holding Line of CAL 768.64 m (FM-DS).
- c) One no. Proposed 140 Ton IMWB at ch.3665.008 m F/CSB of TLHR on new holding line just opposite of existing lead line weigh Bridge.

4.1.5 The details of layout have been described in the relevant Para of Engineering Chapter of this report.

4.1.6 Illumination of yard line and other buildings.

4.1.7 TFL shall provide loading platform of 660m x 30m with shed on the platform and all other infrastructures.

4.1.8 Relocation of 2 Nos 132 KV towers and shifting of existing 132KV line from existing 132KV switchyard.

4.1.9 TFL should Lift the Conveyor belt at Ch. 4189.508 F/CSB

## **4.2 Profile of the section**

4.2.1 The proposed alignment is mostly laid in straight with short stretches of curves of radius varying between 220m & 583.33 m. The alignment also crosses a service road and 132KV line from existing 132KV switch yard.

## **Part A: Traction Distribution**

### **4.3 Mode of traction**

4.3.1 The section is to be electrified by 25KV 50HZ Single Phase AC. To maintain uniformly of Traction, it is necessary to electrify the siding including connected new unwired track.

### **4.4 Scope of wiring**

4.4.1 The entire siding taking off at proposed ch. 0.00m is to be electrified.

4.4.2 As already mentioned, the proposed siding takes off from new siding line. It is imperative to wire up new siding line to maintain uniformity of traction between Ch.3710.02 F/CSB(Ch.0.00) from DN Main Line to 4109.617 m F/CSB TLHR & Ch. 3285.977 F/TLHR from Global Coal & Mining Pvt Ltd on line to Ch.7395.579 F/CSB TLHR buffer end covering a distance of about 7.396 route Kms and approximate 21TKM of OHE.

### **4.5 Description of OHE and related issues**

4.5.1 Conventional all copper regulated OHE of 150 Sqmm section when new & mounted on swiveling cantilever supported from standard masts / structures at interval shall be provided with standard spacing normally matching with OHE available on yard lines & on the shunting neck where from the siding is taking off. High creepage Insulator of 1050 mm/1600 mm CD or Porcelain Insulator, as necessary, shall be provided. Standard foundations to RDSO Design matching with soil condition & type of loading shall be adopted. as detailed in the scope of 4.1 above and as per ACTM of Railway Board. The project section is located in Red Zone of Wind Pressure 178Kg/m<sup>2</sup> and wind speed 50m/sec. Maximum permissible OHE span 54M.

4.5.1.1 Loading line & B.V siding will be tramway type regulated OHE or conventional type as deciding by East Coast Railway.

4.5.1.2 Provision of isolators will be made available for isolating & separating the charged sections for working at loading platforms or loading track hopper & other places and isolating the faulty section by trained staffs.

4.5.1.3 Provision of SSP/SP with 25KV feeder circuit breaker with control relay panel for feeding from existing 25KV supply from East Coast Railway from nearest electrified line and segregation during fault. Interrupters will be provided for isolation/operation from nearest Traction Power Control, Khurda Road Division through Supervisory Control and Data Acquisition System(SCADA) as per RDSO latest specification.

4.5.1.4 Provision of SCADA with communication cables from Khurda Road TPC for operation of circuit breaker with interrupters at proposed railway siding at SSP/SP.

4.5.1.5 TFL to confirm the following:

- a) That no caustic or acidic fumes in vicinity of traction installation will be exhaled by the plant.
- b) Edge of wagon loader shall maintain safe clearance of 2 meter from centre line of electrified track.
- c) Bucket conveyor for recovery/recycling of good urea collected from the cut and torn bags etc. shall be located at the bagging plant and not to the bagging platform.
- d) Conveyor for transportation of loaded urea bags to wagon loader will maintain a height of more than 10mtr.
- e) Width of shed verticals across track shall not be more than 0.7 meter
- f) TFL should be Lifted Conveyor belt at Ch. 4189.508 F/CSB

4.5.1.6 Total TKM to be electrified including modification & dismantling works is assessed to be to the tune of 21 TKMS.

#### **4.6 Provisions of AT for Cabin**

4.6.1 25 KV/230 V x 10 KVA ATs shall be provided to meet signal load under In-Plant cabin, as an alternate source with auto-changeover switch in addition of local power supply. Same to be provided by TFL authority.

#### **4.7 Working of rake under electrified loading lines**

4.7.1 Empty rake hauled by electric loco and approaching the TFL siding shall be received on any one of the two loading lines with OHE in charged condition.

4.7.2 On arrival of the rake at a nominated loading line, the electric loco shall get detached & pick up brake van for placement of the same on brake van siding loop.

4.7.3 DP isolator with earthing heel & single pole isolator with earthing heel shall then be opened out in sequence to make the loading zone dead & earthed, after ensuring that the full rake is placed in proper position for loading.

4.7.4 The site supervisor shall then direct his staff for commencement of loading after ensuring that OHE is dead & earthed properly. On completion of loading, the site supervisor shall ensure that all men & materials are withdrawn to a safe distance.

4.7.5 Electric loco shall then move to loco stabling line via engine line & wait for picking up loaded rake.

4.7.6 Both single pole isolator with Earthing heel & DP isolator with Earthing heel shall now be closed in sequence to facilitate picking up of loaded rake by electric loco waiting at stabling line.

4.7.7 Opening of Isolators, issuing of instructions for loading the rake, withdrawal of staff material handling equipment after loading and closing of isolators etc. shall be done through exchange of private number among concerned officials of TFL.

#### **4.8 Level crossing Height gauge**

4.8.1 Consequent upon electrification of new line upto the take off for TFL siding as well as In-Plant yard, Level crossing Height gauges across Service road & Other roads are to be provided.

#### **4.9 Modification of Power Line**

4.9.1 11 KV & 33 KV overhead Power line is crossing with proposed electrified line near northern end of the factory gate, Tribeni Camp near ROB, & others.

4.9.2 Consequent upon electrification of this line, the overhead line is proposed to be dismantled & connect it by cable as per crossing regulation.

#### **4.10 Removal of infringement**

4.10.1 Relocation of 2 nos ,132 KV towers,. Rate would be vary at the time of relocation.

4.10.2 Shifting/Raising height of 132KV feeder line from existing 132KV switchyard over proposed electrified track.

### **Part B: General Services**

#### **4.11 Electrification of Service Buildings**

4.11.1 Electrification of In- Plant Cabin, crew rest room, FOIS & TMS room has been considered.



#### **4.12 Illumination of Railway yard & pathway for GDR check.**

4.12.1 It is proposed to provide 30 nos. of 30m high masts for illumination of necks of the railway yard having adequate number of luminaries of 350W capacity.

4.12.2 A concrete pathway to facilitate checking of rake by Guard & Driver has been proposed for which proper illumination of the same is to be done. Accordingly it is proposed to provide suitable illumination spaced at reasonable interval.

#### **4.13 Type of Luminaries**

4.13.1 All luminaries shall be of LED type to conserve energy.

### **Part C: General**

#### **4.14 Agency for execution of work**

4.14.1 It is considered that Railway will agree to entrust the siding owner for execution of this work through consultant like RITES. In such case, the work will be undertaken on the duly adhering the following: -

- (i) Wiring plan will be submitted to Sr. DEE/TRD, Sr. DOM, CEDE & CTPM of the concerned Railway for approval.
- (ii) Sectioning & Power supply diagram shall be submitted to Sr. DEE/TRD & CEDE of the concerned Railway for approval.
- (iii) All drawings & Designs on Retractable OHE shall be submitted to Sr. DEE/TRD & CEE of concerned Railway for approval.
- (iv) All Traction materials shall be procured from latest CORE/RDSO approved sources.
- (v) All design and drawing shall conform to latest RDSO/CORE Designs and guidelines.
- (vi) As for General services works like electrification of buildings/illumination of yard/GDR Pathway etc, the same shall be done as per latest Building code with Energy efficient equipment of 3- star or above rating. Equipment having BEE approval shall be used. All other materials shall only be from ISO approved firms.
- (vii) All materials under (vi) shall be of 3- star and above ratings wherever applicable.
- (vii) Drawings on modification to Power line shall be got approved by Railway prior to execution of the work.

4.14.2 Railway to confirm approval of:

- a) Sectioning & Power supply cum wiring diagram prior to commencement of work.

- b) Design of OHE conforming to RDSO guidelines matching with OHE available.
- c) All materials for electrification work shall be procured from latest regular supplier approved by CORE/RDSO adhering to latest specification.
- d) SCADA work shall be executed through the party whose system is in operation or through the contractor engaged for maintenance of SCADA system under Khurda Road Division RCC.

4.14.3 Estimate has accordingly been made

**4.15 Training of Siding Personnel for operation of Isolators.**

4.15.1 It may not be always possible to depute Railway staff for opening of Isolators under bulb area for working of Retractable OHE in particular. In view of above, it is suggested that nominated siding personnel shall be counseled by consultant and Railway shall issue competency certificate on being satisfied after carrying out test by Railway.

**4.16 Maintenance of OHE and General**

4.16.1 As per Freight Marketing Circular No.6 of 2020, No.2018/TC(FM)/14/04 dtd- 23.06.2020 OHE Maintenance cost for new sidings shall be borne by the siding owner in accordance with Railways guidelines. Railway will carry out necessary inspection of maintenance work once in six months .

**4.17 Cost of work**

4.17.1 Anticipated cost of electrification, excluding the elements of GST, Departmental charge etc. is tabulated below:

Department	Basic Cost of work for TFL Siding(Rs. In Lakhs)	Labour welfare cess @1% on Basic Cost	GST @ 18% on Basic cost	Deptt. Charge		Environmental Cess @1% on (Basic Cost + Labour Welfare Cess)	Total
				TRD @ 6.25% on Basic Cost	General @4% on Basic Cost		
<b>TRD Cost</b>	2561.31	25.61	461.04	160.08		25.87	<b>3233.91</b>
<b>General Cost</b>	1236.40	12.36	222.55		49.46	12.49	<b>1533.25</b>
<b>TOTAL</b>	<b>3797.71</b>	<b>37.97</b>	<b>683.59</b>	<b>160.08</b>	<b>49.46</b>	<b>38.36</b>	<b>4767.16</b>

4.17.2 Details are furnished under **Annex-8.3.**

4.15.3 A Tentative Sectioning cum wiring Diagram Attached in **Annexure 4.1**

## CHAPTER-V

### Commercial aspects

#### 5.0 General

5.0.1 The policy of 'Engine-on-Load' (EOL) scheme as incorporated in Freight Marketing Circular No. 5 of 2013 dated 07.03.2013 shall be followed. The loading will be done within the specified free time for various types of block rakes which is given as under:

Type of wagon	EOL free time in hrs.	
	Loading	Unloading
<b>Open Rake (BOXN etc.)</b>	3:00	5:00
<b>Hopper Rake (BOBR etc.)</b>	3:00	2:00

#### 5.1 Weighbridge and TMS Facilities

5.1.1 Weighment of coal will be done in Weigh Bridge. For this purpose, One '140 ton Electronic In-Motion Weighbridge' is proposed to be provided at yard for verification of weighment of inward coal/Lime stone/Pet Coke traffic. The weighbridges should conform to the Schedule of Technical Requirements as per RDSO's latest specifications as regard to installation of weighbridge. The siding owner should arrange calibration, testing & certification from the manufacturer / authorized service provider.

5.1.2 The Weigh Bridges should be linked with FOIS Terminal for which a separate set of office with necessary furniture will be provided at the cost of siding owner. TMS equipment and hardwire peripheral should also be arranged by the siding owner.

#### 5.2 Staff cost

5.2.1 The siding owner shall bear the cost of one Commercial staff per shift or as decided by Railway, depending upon work load. As soon as the siding is notified by the Railway Administration, the siding owner shall be advised by the Khurda Road Division to deposit the cost of posts of commercial staff, estimated for 10 years period to facilitate commercial functioning of the private siding.

#### 5.3 Execution of Private Siding Agreement

5.3.1 Private siding agreement on the basis of the revised layout plan shall be executed between Railways and Siding owner as and when, the relevant agreement documents are presented to the siding owner by Railways.

#### **5.4 Pollution Control**

5.4.1 TFL has to obtain necessary environment clearance from MOEF before commissioning of the loading arrangement at the siding and the status be informed to the Railways.

5.4.2 Since no mechanical system of loading is being developed for the proposed loading line, it should be ensured by TFL that loading of wagons will be completed within the prescribed limit of free time under EOL concept.

## CHAPTER-VI

### Mechanical Engineering

#### 6.0 Introduction

- 6.0.1 Intensively examined empty trains are to be supplied for loading by IR and train should run on round-trip BPC. Hence, there will be no need for any maintenance facilities within the siding premises. However, the costs of re-railing / restoration work, in case any accident or derailment occurred owing to the fault of siding holder, will usually be borne by the Siding holder.
- 6.0.2 The siding will come up with EOL concept and the train engine will remain available during loading or unloading operations in the siding on Railway's account. The siding owner may, therefore, not be required to maintain a captive engine at his cost under the 'EOL' operations.
- 6.0.3 For damage and deficiency to wagons inside the siding premises owing to negligence of siding owner, regular damage and deficiency bills will be raised on the siding owner on the basis of joint sample check to be done in every six months or as fixed by East Coast Railway. However, for severely damaged wagons, this will be done on case to case basis. Railway's discretion for charging damage/deficiency bills on case to case basis shall be final vide Railway Board's letter no. 2010/TT-IV/9/1 dt. 18.09.2015.
- 6.0.4 Joint check of loading points where mechanized equipments are used, should be carried out by officers of Mechanical and Operating / Commercial branches of Railway once in 3 months along with the loader/un-loader. Penalties for damages, if detected, should be imposed as per extant rules.
- 6.0.5 One rest room with toilet facilities for the train crew near the loading point and pathways for GRD checking shall be provided.

## CHAPTER-VII

### Operation & Maintenance of the Siding

#### 5.0 General

5.0.1 The siding will be worked on EOL concept and the policies on 'Liberalization of Siding Rules' as communicated vide FM Circular No. 11 of 2016 as distributed under Railway Board's letter No. 99/TC/(FM)/26/1/Pt. II dated 22.08.2016 should be followed regarding maintenance of the siding.

#### 5.1 Civil Engineering

5.1.1 Civil Engineering maintenance shall be done by the siding owner at his cost and Railways should not claim for any inspection charges. The siding may be maintained by engaging approved Agency.

#### 5.2 Electrical

5.2.1 OHE maintenance cost for the siding shall be borne by Railways. The cost for maintenance of Electrical (General) assets within the Siding holder's premises will obviously be incurred by the siding holder.

#### 5.3 Carriage & Wagons

5.3.1 As regards to C & W maintenance, no C & W facility should be developed inside the siding premises. Running repairs of rolling stocks including materials and staff cost in all cases shall be borne by the Railway. However, the cost of re-railment including repair cost of Railway stock owing to any derailment or accident occurred due to the negligence of siding owner shall be borne by the siding owner.

#### 5.4 Signal Engineering & Telecommunication

5.4.1 It is proposed to run two no. of E.I. Panel Cabin at the approach of the Loading/Unloading yard premises. For maintenance and up keeping of the signaling assets TFL can provide following staff, may be from the retired Railway employees.

Sl. No	Description of Staff	Nos.
1	S & T Supervisor	2
2	S & T Maintainer LR & RG	2
3	S & T Helper including LR & RG	4
<b>Total</b>		<b>8</b>

## 5.5 Operating Staff

5.5.1 For smooth operation of the E.I. cabin and to conduct shunting operation for attaching and detaching / reversal of train engine/ brake van following operating staff, may be provided from retired Railway employees, as assessed for round the clock working for train operation:

<b>Sl. No.</b>	<b>Description of Staff</b>	<b>Nos</b>
1	Supervisor (Traffic)	2
2	Panel Operator including RG & LR	8
3	Traffic Assistant including RG & LR	8
4	Shunting Supervisor including RG & LR	8
5	Shunt man including RG & LR	8
<b>Total</b>		<b>34</b>

## CHAPTER-VIII

### Anticipated Cost of Railway Infrastructure

#### 6.1 Civil Engineering Cost

6.1.1 The Civil Engineering cost has been computed taking into consideration of present day cost of earthwork, Permanent Way, Track Ballast, Track fittings, RUB, Bridges etc. for the Railway Infrastructure as planned in the report. The project shall be constructed on the private land of TFL except at the Y-Connection take off junction from Railways /MCL. As such cost is not included in the estimate. The anticipated basic cost of Civil Engineering works amounts to **Rs. 11488.65 lakh** and the abstract cost estimate is placed at **Annex-8.1**.

#### 6.2 Signal Engineering & Telecommunication Cost

6.2.1 The anticipated cost for the Signal and Telecommunication arrangements for the related works for the proposed EI Cabin including alteration works at Talcher station has been estimated at **Rs. 2735.60 Lakh**. Abstract cost of the estimate is placed at **Annex-8.2**.

#### 6.3 Electrical Engineering Cost

6.3.1 The anticipated cost of OHE has been prepared based on the norms adopted in Railways for provision of OHE. The cost of general electrical works for illumination of loading yard has been included in the cost of estimate also. Anticipated cost of OHE and Electrical(G) works is estimated to **Rs.3797.71 Lakh** and is placed at **Annex.-8.3**.

#### 6.4 Total Capital Cost

6.4.1 Anticipated total basic cost for construction of the railway infrastructure for the proposed TFL siding has been estimated to **Rs. 18021.96 Lakhs**. The cost is exclusive of GST and other taxes, Land Cost, PMC charges ,Railway charges and other statutory charges. The breakup of cost is tabulated below and details are shown at **Annex-8.0**

Sl.No.	Type of Works	Anticipated Cost(in lakh of Rs.)
1	Civil Engineering	<b>11488.65</b>
2	Signal Engineering & Telecommunication	<b>2735.60</b>
3	Electrical Engineering (TRD)	<b>2561.31</b>
4	Electrical Engineering (General services)	<b>1236.40</b>
<b>Total</b>		<b>18021.96</b>



6.4.2 As clarified vide paragraph No.5 of Railway Board's FMC No. 11 of 2016, circulated under Railway Board's letter No. 99/TC/(FM)/26/1/Pt-II dated 22.8.2016, departmental charges, (inclusive of cost of Tools & Plants and Establishment supervision), executing agency wise, shall be applicable as per following table:

Departmental charges and stages of payment					
Sl No	Agency	Total charges	Stages of payment	Departmental charges*	
1	Railway	12½%	Approval of undertaking survey	1% of AC	
			Conveying approval to survey / plan & estimate	2% of EC – 1% of AC	
			Before commencement of execution of work	8½% of EC	
			Applying for final approval of completed work	12½% of EC – amount paid	
2	Party	6¼%	Approval of undertaking survey	1% of AC	
			Conveying approval to survey / plan & estimate	2% of EC – 1% of AC	
			Before commencement of execution of work	2¼% of EC	
			Applying for final approval of completed work	6¼% of CC – amount paid	
3	Approved Consultant	4% (all works except OHE & S&T)	Approval of undertaking survey	1% of EC	
			Conveying approval to survey / plan & estimate	2% of EC – 1% of AC	
			Before commencement of execution of work	Nil	
			Applying for final approval of completed work	4% of EC – amount paid	
		(for OHE & S&T works)	6¼%	Approval of undertaking survey	1% of EC
				Conveying approval to survey / plan & estimate	2% of EC – 1% of AC
				Before commencement of execution of work	2¼% of CC – amount paid
				Applying for final approval of completed work	6¼% of CC – amount paid

**\*AC : Anticipated Cost i.e., cost as per Feasibility Study Report;**

**EC : Estimated Cost i.e., as per Detailed Project Report;**

**CC : Completion Cost i.e., Cost calculated on the basis of actual payment made for the Project.**

## LIST OF ANNEXURES

<b>Annex No.</b>	<b>Subject</b>
1.1	RITES' letter No. RITES/RPO-KOL/TFL/2019/2088 dated 11.07.2019
1.2	Copy of the MOM held on 11.09.2019
1.3	Copy of the e-mail dt. 18.09.2019
1.4	Additional Chief Engineer, PDIL's e-mail dated 05.11.2019
1.5	A copy of the comments received from AGM (Mech), PDIL vide e-mail dt. 20.12.2019
1.6	Submission of FR to Railway vide RITES' letter No. RITES/RPO-KOL/TFL/2019/3808 dt. 27.12.2019
1.7	Copy of MOM held on 07.01.2020 at Talcher between Railway, Talcher Fertilizers Ltd & RITES Ltd.
1.8	RITES Letter no. RITES/RPO-KOL/FR & DPR/TFL-Talcher/2020/2859 dt. 11.12.2020
1.9	CTPM/EcoR/BBS's letter no. COM/Plg./BBS/TFL/TLHR/530 dt. 18.03.2021
1.10	Sr. DOM/ECOR/KUR's letter no. PL3/Siding/TFL/FSR/TLHR/21 dt. 21.05.2021 (IPA)
1.11	AGM (Mech.) PDIL's letter No. PC150/PNPM-TFL/L/391 dt. 16.09.21
2.0	Engineering Scale Plan and L- Section (04 Sheets)
2.0.1	Key Plan
2.1	List of Bench Mark
2.2	List of Gradient Statement & Gradient Abstract
2.3	List of Curve & Curve Abstract
2.4	Typical Profile of Embankment & Cutting
2.5	Details of Track Structure
2.6	List of Bridge & Bridge Abstract
2.7	List of Road Crossings
2.8	List of H.T & L.T Crossings
3.1	Sketch Plan showing Interlocking arrangement
4.1	Wiring cum Power Supply Drawing
8.0	Summary of Anticipated Cost
8.1	Anticipated Cost of Civil Engineering work
8.2	Anticipated Cost of Signaling & Telecommunication work





प्रोजेक्ट्स एण्ड डेवलपमेंट इण्डिया लिमिटेड  
(भारत सरकार का उपक्रम) : मिनी रत्न-1 कंपनी

**Projects & Development India Limited**  
(A Govt. of India Undertaking) : A Mini Ratna-1 Company

PDIL Bhawan, A-14, Sector-1, NOIDA-201 301

Distt. Gautam Budh Nagar, (U.P.), India

CIN : U74140UP1978GOI028629

ISO 9001:2015 & OHSAS 18001:2007 Certified  
and

ISO/IEC 17020:2012 Accredited

Annex-11

Ref. No.PC150/PNPM-TFL/L/ 391

Date: 16.09.2021

M/s. RITES,  
REGIONAL PROJECT OFFICE,  
METRO RAILWAY SERVICE BUILDING ( 2<sup>ND</sup> FLOOR),  
56, C.R. AVENUE, KOLKATA -700012

Kind Attn.: Shri Tapan Kumar Biswas (JGM/CIVIL/HQs)

Subject : our comments on DPR

Ref. i) DLOA Ref. No. TFL/NOIDA/PROJECT/RAILWAY/LOA-007/19-20dtd30.05.2019

Dear Sir,

This has reference to the DPR submitted by RITES.

TFL/PDIL observation as follows. RITES is required to submit the revised DPR incorporating these comments.--

	Page no/ Clause	Description	Corrections
01	2 of 40 Sl no. 5	PDIL letter Dated 19.11.2019	to be changed to 19.11.2018
01	6 of 40	Traffic projection; Talcher (throughout Odisha)	To include as per discussion during meeting with Railways
	Page 3 of 40 Sl .no 14.0	The proposed alignment of the siding will take off from the existing lead line of GCMPL siding. at Ch.3770.893 m (F/CSB/TLHR).	May please check the Chainage
	13 of 40 1.6.1	Third para CH 3770.893m	RITES may explain
01	15 of 40 1.9.3 (b)	Loaded coal rakes shall be received either on Pre-Tipler line (line No.1) or onTrack Hopper line (line No.3)	Loaded coal, Petcoke, limestone rakes shall be received either on Pre-Tipler line (line No.1) or

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		according to type of wagon to be dealt with	onTrack Hopper line (line No.3) according to type of wagon to be dealt with
02	16 of 401.9.5	Inward loaded rakes containing Lime stone & Pet coke will be dealt at line No.4 and empty rakes for out ward Urea traffic will be loaded from line No.5. In both the cases, the concerned rake will be directly received on the nominated line and the OHE shall be isolated, when required. After completion of loading / unloading, the rake shall be dispatched after reversal of Brake Van / Train Engine.	Line no 04 & 05 are for handling urea product only. RITES to make necessary corrections in the clause
03	28 of 404.1.8	Relocation of 2 Nos 132 KV towers and shifting of existing 132KV line from existing 132KV switchyard.	Have RITES received the foundation details from PDIL.
04	28 of 404.1.9	TFL should be Lifted Conveyor belt at Ch. 4189.508 F/CSB	The cost has been considered in the cost of DPR. RITES to give details of height to be lifted and other details. This are required for communications to NTPC.
05	18 of 40 2.0.1  23 of 40 3.0.3  27 of 404.0.1	CIVIL ENGINEERING The nearest railway station is Talcher which is about 7Km from the site on Rajatgarh Jn and Talcher electrified section in Khurda Road Division of East Coast Railway.  SIGNAL ENGINEERING & TELECOMMUNICATION .....from where the siding line will go to TFL loading Yard for transportation of Fertilizer from their Amonia-Urea Fertilizer complex at a distance of 5.45 km from Talcher Railway station of Khurda Road Division of East Coast Railway.  Electrical Engineering The proposed fertilizer unit of TFL at Talcher will be situated at the location of about 5km of Talcher Railway Station of Khurda Road Division of East Coast Railway.	Why different length from TFL plant to Talcher Railway station?
	1 of 40 &	Track KM= 19.200 KM, Total Route	

	21 of 40	length(including Y-connection) KM=6.585 KM	
06		Annex 8.0	Indicate project cost and codal charges in separate tables
07	ESP ANNX 2.0 SH 3 Of 4	Gradient in Siding platform area is 97.496 against 95.473 in FSR	
09	Page 18 of 40	Doubling of Track (Buffer Line) : Doubling of track is proposed in between Ch1327.363m./Ch.3154.227m F/CSB Talcher (Neck of Y-Leg Connection) up to Dead End at Ch 7395.579m (F/L-1).	Till buffer end??
	Page 23 of 40 3.1.1	In Phase-1	There will be no phases.
	Page 27 of 40 4.1.1	In Phase-1	There will be no phases.
			No slope is to be provided between CH: 5700m and CH: 6420m Urea Bag loading platform area.
			In FSR, drawing no.- RITES/KOL/TFL/Talcher, Sheet-3 of 3, Formation level at CH: 5700 is 94.860m and Formation level at change CH: 6400 is 94.276m in urea bag loading platform.  Whereas In draft DPR, Formation level at change CH: 5700 is 97.000m and Formation level at change CH: 6400 is 96.394m in urea bag loading platform.  Approximate 2.14m level has been raised. This is not acceptable.
			<b>Scope of RITES</b> - Rail for side arm charger shall be in RITES's scope or not. - Rail for Wagon tippler shall be in RITES's scope or not. - Lifting of NTPC conveyor at

*Ar*

			CH:4189.508m – 4 nos. Relocation of HT 132 kv lines in Y section area.
			At Track no-5 , Ammonia loading shall be done, RITES to take care RDSO as per Ammonia loading.
			RITES to inform that post – Tippler rail track shall be electrified with 25 KV line or not.
			Indication of In-motion weigh bridge shall be required in Bagging building control room and Coal handling control room and shall be interfaced with Urea Bagging control room and Coal handling control room.

**Note:**

RITES to confirm that all observations of Railways have been complied

Please send us the revised DPR after incorporation of these comments urgently.

Thanking you

Regards

*Am* 16-09-2024  
(Amarendra Kumar)  
AGM (Mech.)

Copy to : Sri Amit Kumar Singh , GM (TFL)

CIN - L74899DL1974G01007227

No. RITES/RPO-KOL/TFL/2019/2088  
Date 11<sup>th</sup> July, 2019

To  
Shri Amarendra Kumar  
AGM (Piping)  
M/s. Projects & Development India Ltd.  
P.D.I.L. Bhawan, A-14, Sector-1,  
Noida - 201301 (email: [amarendra@pdilin.com](mailto:amarendra@pdilin.com))

Dear Sir,

Sub: Preparation of Feasibility Report (FR) & Detailed Project Report (DPR) for New Railway Siding Facility for Talcher Fertilizers Limited, Talcher.

Ref: DLOA No.: TFL/NOIDA/PROJECT/RAILWAY/LOA-007/19-20 Dated 30.05.2019

This is in connection with the above cited subject work. On receipt of the above cited work order we had mobilized our survey team for Topographical survey of the TFL site at Talcher. Accordingly we have prepared the discussion drawing with 02 alternatives. The following are the salient features of the 02 alternatives.

Alignment alternative 1.

(A) Bagging Plant Yard: The following facilities are proposed:

- 01 no Wagon loading platform of 700 x 30m
- 02 Loading lines on either side of the platform
- 01 Engine escape line
- 01 Shunting neck
- 01 Break van reversal

The following are the constraints

- Additional acquisition of land is involved since the track enters the bagging plant yard directly and not through the old alignment gate
- Due to non-availability of adequate space, the dead end portion of bagging plant is extending beyond plant boundary by about 20mts.
- Though the alignment shown is passing through edge of the grave yard, there are no specific boundary points available at site
- Proper drainage needs to be planned in the yard area.
- 11 KV HT line required to be shifted or diverted

(B) Coal unloading yard: - The following facilities are proposed:

- Unloading through wagon tippler
- Unloading through track hopper (200 m length)
- Pre Hopper line
- Post Hopper line
- Pre Tippling line

*(Handwritten signature)*  
11/07/19



- Post Tippling line
- Break van siding
- Shunting necks (02 nos on either end of the yard)
- 01 Engine escape line

Alignment alternative 2.

(A) Bagging Plant Yard : The following facilities are proposed.

- 01 no Wagon loading platform of 700 x 30m
- 02 Loading lines on either side of the platform
- 01 Engine escape line
- 01 Shunting neck
- 01 Break van reversal

The following are the constraints

- Additional acquisition of land may not be involved since the track enters the bagging plant yard directly through the old alignment gate.
- Due to non-availability of adequate space, the dead end portion of bagging plant is extending beyond plant boundary by about 50mts.
- Proper drainage needs to be planned in the yard area.
- Shifting of 02 nos of 132 KV HT line towers need to be appropriately shifted as per RDSO guidelines.
- 11 KV HT line required to be shifted or diverted

(B) Coal unloading yard: - The following facilities are proposed

- Unloading through wagon tippler
- Unloading through track hopper (200 m length)
- Pre Hopper line
- Post Hopper line
- Pre Tippling line
- Post Tippling line
- Break van siding
- Shunting necks (02 nos on either end of the yard)
- 01 Engine escape line

Please find enclosed herewith 02 nos of discussion plan drawings showing alternative 01 and alternative 02 separately. You are requested to offer your comments/observations on the above proposals to enable us to take further course of action on the same. Further it is suggested to have 1<sup>st</sup> meeting involving PDIL, TFL and RITES officials at RITES/Kolkata, where Experts are available for consultation and finalizing the drawing.

Thanking you and assuring of all services at all times.

Yours faithfully,

(K. Rama Krishna)

Addl. General Manager/Civil/HQ

Encl: 02 nos drawings.

Copy to: Shri A.K.Singh , GM (Talcher – JV) , Talcher Fertilizers Limited, GAIL Training Institute, Plot no. 24, Film City, Sector 16A, Noida (U.P) – 201301,  
e-mail: [ak.singh@gail.co.in](mailto:ak.singh@gail.co.in)

Minutes of the meeting held at RITES/Kolkata office on 11.09.2019 between TFL, PDIL & RITES officials in connection with the TFL Projects of Talcher.

Members Present:

<u>TFL</u>	<u>PDIL</u>	<u>UTES</u>
Shri Ashiho Pukini,,Dy.GM	Shri Narendra Singh/Addl. C.E	Shri T.K. Biswas/ Jt. GM(C) Shri P.R. Sarkar/ SDGM/(C) Shri S.P.Roychaudhury/Manager(C) Shri T.K.Das/Expert (Traffic) Shri D.K. Banerjee/Expert (E)

At the outset Shri T.K.Biswas, JGM (C)/ RITES, welcomed the officials of TFL & PDIL at RITES Office and appreciate for their presence.The following discussions were held in view of the Discussion Plan submitted by RITES:

1. Line No.4 & 5 have to be shifted 25 m towards the plant area to have clearance between Urea loading line and coal unloading line. In the Discussion plan, 11m clearance between Line No 4 & 3 has been provided and after shifting the clearance will be 36m.The shifting of 25m will be confirmed by.PDIL.
2. Construction of ROB/RUB over the existing road crossing at CH. 649.0m will not be feasible technically due to land and level constraint.Proposal with surface crossing will be submitted to railway for their appreciation and we have to follow railway's directive if any after submission of FSR.
3. Shifting of High Tension Tower after the TFL/PDIL gate has to be explored by the TFL authority.
4. Loading platform will be 660 X 30 m as per Railway's standard requirement.
5. The TFL/PDIL will submit on line application to CTPM/East Coast Railway for registration of the proposed siding along with non-refundable fees of Rs. 20,000/- at the earliest.
6. TFL/PDIL will furnish traffic projection of both the inward and outward traffic for project appreciation. Details of project is required for preparation of FSR and will be furnished by TFL.
7. TFL/PDIL to indicate source of power supply for electrification of siding.
8. Formation Level at loading platform shall be 94.95m from bench mark. At entry gate near CH 845m formation level shall be 96,47m. Formation level at buffer end should be 93.8 tentatively.
9. Official approval of Discussion plan to be communicated to RITES for preparation and submission of draft Feasibility Study Report.

The meeting concluded with thanks.

  
11/09/19  
TFL

  
11/09/19  
PDIL

  
11/09/19  
UTES

**Development of New Rly siding facility for proposed Talcher Fertilizer Limited/Talcher**

From: tapan biswas (tkbiswas2006@yahoo.co.in)  
To: amarendra@pdilin.com; narendra@pdilin.com  
Date: Wednesday, 18 September, 2019, 06:14 pm IST

Dear sir,

Reference DLOA No.: TFL/NOIDA/PROJECT/RAILWAY/LOA-007/19-20 Dated 30.05.2019.

A meeting held with PDIL and TFL officials on 11.09.2019 at RITES/Kolkata, in connection with shifting of alignment which is line no. 4 & line no. 5 for loading platform as per discussion and as desired by your officials, the plan has been prepared accordingly which is enclosed herewith for your information and communicate your approval so that further necessary action can be made by this office to prepare the FSR and submission to PDIL.

Regards,

**T K Biswas**

**Joint General Manager/Civil**

**RITES Ltd (Ministry of Railways)**

**(A Schedule 'A' Company)**

**Mobile No +919903141936**

 TFL PLANT LAYOUT PLAN.18\_09\_19.dwg(ALT-4).dwg  
16.1MB

**From:** "Narendra Singh, Addl. Chief Engineer" <Narendra@pdilin.com>  
**To:** "tapan biswas" <tkbiswas2006@yahoo.co.in>, "roychoudhury.sakti@gmail.com" <roychoudhury.sakti@gmail.com>  
**Cc:** "R R Kumar, Addl. GM/ राजीव रंजन कुमार" <rrkumar@pdilin.com>, "Amarendra Kumar, AGM (Mech)" <amarendra@pdilin.com>, "Amit K Singh (???? ????)" <ak.singh@GAIL.CO.IN>, "A Pukini (ए पुकिनी)" <apukini@gail.co.in>, "UP Tudu, Addl. GM (Civil)" <uptudu@pdilin.com>, "Kailash Joshi, Project Manager" <kjoshi@pdilin.com>, "Dharmdeo" <dharmdeo@pdilin.com>, "Jitendra Kumar Singh" <jksingh@pdilin.com>, "Saima Shireen" <Saima@pdilin.com>  
**Sent:** Tue, Nov 5, 2019 at 10:44  
**Subject:** FSR for Railway siding \_ TFL- Talcher

Dear Sir,

You are requested to prepare the feasibility report as per Alt-4 submitted by Shri Saktipada Roychoudhury and revised plot plan (PC0009-0000-0001 Rev05) attached for your reference.

Thanks & regards,  
Narendra Singh

---

**From:** A Pukini (ए पुकिनी) [mailto:apukini@gail.co.in]  
**Sent:** 04 November 2019 14:19  
**To:** Amarendra Kumar, AGM (Mech)  
**Cc:** Narendra Singh, Addl. Chief Engineer; Amit K Singh (अमित सिंह)  
**Subject:** FW: Updated plot plan Rev-5\_OP2 of TFL

Sir

As discussed, the signed revised plot plan may please be submitted to RITES at the earliest for RITES to prepare the Feasibility Report.

Regards

A Pukini (ए पुकिनी)  
DGM (PD-PL) उप महाप्रबन्धक (पीडी-पीएल)  
GAIL (India) Limited  
गेल (इंडिया) लिमिटेड  
Sector-1  
सेक्टर -1  
Bida-201301

Forwarded Message -----

**From:** "Amarendra Kumar, AGM (Mech)" <amarendra@pdilin.com>  
**To:** "tapan biswas" <tkbiswas2006@yahoo.co.in>, "Saktipada Roychoudhury" <roychoudhury.sakti@gmail.com>  
**Cc:** "Narendra Singh, Addl. Chief Engineer" <Narendra@pdilin.com>, "Amit K Singh (अमित सिंह)" <ak.singh@GAIL.CO.IN>, "A Pukini (ए पुकिनी)" <apukini@gail.co.in>, "R R Kumar, Addl. GM/ राजीव रंजन कुमार" <rrkumar@pdilin.com>, "Saima Shireen" <Saima@pdilin.com>, "UP Tudu, Addl. GM (Civil)" <uptudu@pdilin.com>, "Kailash Joshi, Project Manager" <kjoshi@pdilin.com>  
**Sent:** Fri, Dec 20, 2019 at 17:45  
**Subject:** FW: comments on FSR - railway siding , TFL  
 Dear Sir,

With reference comments sent on 13.12.2019 and our discussion please note the following :-

1. **Annexure 8.1.1.** (civil engineering cost estimate): SI .no 5: it is to be noted that approx 5,00,000 cum good soil is generated during land development which can be used for this purpose.
2. Annexure 8.1.1 (civil engineering cost estimate): SI .no 2 : as explained by you to be considered in scope of RITES.
3. Annexure 8.1.4 (civil engineering cost estimate): SI. No. 1(iii) : Nalah Diversion works: as explained by you to be considered in scope of RITES.

अभारी,

अमरेन्द्र कुमार / Amarendra Kumar

अपर महाप्रबन्धक (यांत्रिकी-पाइपिंग) / Addl.GM (Mech. Piping),

प्रोजेक्ट्स एण्ड डेवलपमेंट इंडिया लिमिटेड, नोएडा / PDIL , Noida,

[amarendra@pdilin.com](mailto:amarendra@pdilin.com)

ph - +91-120-2529842/43/47/51 ext - 250

**From:** Narendra Singh, Addl. Chief Engineer

**Sent:** 13 December 2019 16:03

**To:** tapan biswas

**Cc:** Amarendra Kumar, AGM (Mech); A Pukini (ए पुकिनी); UP Tudu, Addl. GM (Civil); S K Barnwal, DGM(Elect.); Shireen; Kailash Joshi, Project Manager

**Subject:** FW: comments on FSR

Dear Sir,

Please find attached preliminary comments on Draft FR with commented sheets.

Thanks & regards,  
 Narendra Singh

**From:** A Pukini (ए पुकिनी) [mailto:apukini@gail.co.in]

**Sent:** 07 December 2019 16:56

**To:** Amarendra Kumar, AGM (Mech)

**Cc:** Narendra Singh, Addl. Chief Engineer; Amit K Singh (अमित सिंह); A Jharimunya (ए झरिमुन्या)

**Subject:** some comments on FSR

Sir

Please find attached herewith the TFLS comments.  
 Final comments may be collated and sent to RITES by Monday

Regards

A Pukini (ए पुकिनी)

DGM (PD-PL) उप महाप्रबन्धक (पीडी-पीएल)

**Comments:**

1. As per RITES budgetary offer letter no. RITES/RPPO-KOL/ Market/ Vol-51/2018/3691 dtd 19<sup>th</sup> Nov 2018, it states as under:

*“since the tentative alignment mainly runs on the existing railway track formation for about 2.5 km and the balance in the plant area the cost of track including OHE, S&T & P Way track has been considered as Rs. 8.00 cr per KM and accordingly the tentative cost of Railway siding works out to Rs. 72.00 Cr.”*

As per the draft Feasibility report, the anticipated cost estimate of the railway infrastructure is Rs. 118.4623 Cr.

***RITES to mention the justification for the significant increase in the cost estimate in the FSR.***

2. All cost estimates to be given inclusive of GST also.
3. **Annexure 8.1.1.** (civil engineering cost estimate): Sl .no 2 & 3: may like to review the cost estimates since tree felling inside the plant premises is being carried out by TFL through another agency.
4. **Annexure 8.1.1.** (civil engineering cost estimate): Sl .no 4 & 5: May like to review the quantity.
5. **Page 1 of 28 & 3 of 28 :** comment box to be written as **“ Steam generation plant& other OSBL packages”**.
6. **Page 4 of 28 clause 1.4.5 :** ( to add at the end of the para): **“ As per the two alternatives submitted, additional acquisition of land will be involved in both the alternatives”**.
7. **Page 4 of 28 clause 1.4.6 :** ( to add at the end of the para): **“it was deliberated that the two alternatives submitted would entail following constraints :**
  1. **Additional acquisition of land is required outside the plant premises.**
  2. **Obstruction/stoppage of vehicular and people movements during unloading of coal.**
  3. **Portion of the rake will be positioned outside plant boundary during unloading of coal.”**
8. **Page 8 of 28 clause 1.10.2:** RITES may elaborate on how & why the proposed layout does not permit the provision of weighbridge. Specific railway/RDSO norms may be mentioned in the FSR.
9. **Page no. 9 of 28: clause 2.02.2 (a) Alternative –I&II.** ( to add at the end of the para): **“ and other constraints as stated in clause no. 1.4.5 & 1.4.6**
10. **Annexure 8.1.1** (civil engineering cost estimate): Sl .no 2 & 3: Site clearance and tree felling inside the plant premises is not in scope of RITES.

11. Annexure 8.1.4 (civil engineering cost estimate): Sl. No. 1(iii) : Nalah Diversion works: is not in scope of RITES.

12. Annexure 8.1.3 (civil engineering cost estimate): Bridge works : Please give details of whereabouts of these minor bridges as well as RUB along with preliminary drawings- to clarify height and span of RUB. It should be sufficient enough for crossing of trucks.

27.12.2019.

NO. RITES/RPO-KOL/TFL/2019/3808  
Dated 27<sup>th</sup> December 2019.

To  
Chief Transportation Planning Manager,  
East Coast Railway,  
Rail Sadan,  
Ground Floor, South Block,  
Bhubaneswar-230383.

Dear Sir,

Sub: Consultancy services for preparation of Feasibility Report & Detailed Project Report for new Railway siding facility for Talcher Fertilizer Limited at Talcher.

Ref: Your letter No.COM/Plg./BBS/FCIL/TLHR/530 dated 23.12.2019.

.12 (twelve) copies of the Feasibility Report on development of new Railway siding for Talcher Fertilizer Limited is furnished herewith for your perusal and to obtain 'in-principle' approval of the project.

The proposed Fertilizer plant siding would take-off from the lead line of erstwhile FCIL siding near the entry gate of GCMPL's siding at Ch.4430.173 m from CSB of Talcher Station. The Plant yard would consist of 05 lines with provision of 01 Wagon Tippler, 01 Track Hopper for unloading of coal rakes and two platform lines for loading of outward urea traffic and also for unloading of Lime stone & pet coke suitably. Necessary provision for reversal of Engine / Brake van has also been kept.

For quick & safe train movement, one EI Cabin is proposed at the entry point of the Plant yard. The entire siding is also proposed for electrification matching with the traction of adjoining Railway sections with suitable arrangement of isolation of OHE at the Wagon Tippler zone as well as at the loading lines.

Anticipated cost of the Rail-infrastructure facilities, has been worked out to Rs.12,021.07 lakh excluding the implications of GST, Codal / Departmental charge, Labour welfare cess etc. and duly been incorporated in the report.

Thanking you.

Yours faithfully,

(T. K. Biswas)  
JGM/Civil/HQs.

for General Manager (P)

Encl: 12 Copies of FR

Copy to:-

AGM (MECH. PIPING), Projects & Development India Limited, PDIL Bhawan, A-14, SECTOR-1, Noida - 201301 in reference to his e-mail dated 19.12.2019 and Addl. CE, PDIL's e-mail dated 05.11.2019 along with 05 copies of the Feasibility Report for his perusal please. In terms of FM Circular No.11 of 2016, 1% of the anticipated project cost, i.e., Rs.1,20,21,070/- towards departmental / codal charge may please be deposited with FA & CAO, E. Co. Railway at the stage of obtaining 'in-principle' approval of the project

Encl: 05 Copies of FR

o/c





Minutes of meeting held on 07.01.2020 in connection with  
FSR of Talcher Fertilizers Ltd./Talcher.

Members Present:-

Railway:	M/s. Talcher Fertilizers Ltd. & their consultant:
1. Shri Sanjaya Mahapatra, CTPM	1. Shri A. Pakini/DGM, Project/TFL
2. Shri P.C. Sahu, CCM/FS	2. Shri Sunil Singh Negi/Civil/PDIL
3. Shri P.K. Mohapatra, Dy.CEE/Chg	3. Shri Ashwin Acharya/Mech./PDIL
4. Shri M.N. Khan, DY.CE/Plg	4. Shri Ajokesh Roy/Expert, Traffic/RITES
5. Shri P.S. Bhattacharya, Dy CSTE/D&D	5. Shri. S.P. Roychoudhary/Manager@/RITES
6. Shri L. Behera, AEE (TRD)/HQ	

A meeting was held on 24.12.2019 in connection with FSR for a new Railway siding for Talcher Fertilizers Ltd./Talcher for 2200MTPD Ammonia & 3850 MTPD Urea plant. In this connection a Power Point Presentation was given by the consultant. In the meeting the following issues were discussed

1. Erstwhile lead line of PCI siding has been given to Global Coal Mining (P) Ltd. on lease basis. Now, the proposed siding shall take off from GCMPL alignment at CH 4430m F/CSB of TLHR. Route length of proposed siding shall be 2.906 Km from take off.

2. Traffic projection shall be as follows:-

Traffic	Commodity	Source/Destination	Trains/day
Inward Load	Coal	Talcher	3.5
	Lime stone	Paradeep	0.27
	Pet Coke	Paradeep	0.27
Total			4.0
Outward Load	Urea	AP, MP, WB, Jharkhand	1.0
Total			5.0
Empty			5.0
G. Total			10.0

3. The proposed siding is planned with 8 lines. Out of this, there shall be 3 lines at pre yard, 3 lines at post yard for handling inward traffic & 2 loading lines with island handling PF for outward traffic. One Wagon Tippler & one Track Hopper of 250m length are envisaged.

After due deliberations on the project, the following are decided:

1. There shall be 3.5 loaded coal rakes is from TLHR. If Coal is to be sourced from MCL/TLHR, one leg from MCL siding to in plant siding without touching TLHR yard is to be given.
2. One holding line is to be given at inplant siding
3. Final Location Survey of one new BG line from TLHR to ANGI beside GCMPL siding is underway. Proposed siding alignment should not clash with the new BG line

Contd. P-2.

Sanjaya Mahapatra  
10/01/2020  
enfu(T) BR  
J. Anand/Ho  
10/1/2020

4. Double line alignment is to be planned so that while handling inward traffic, exit is available to outward traffic & vice-versa.
5. Ten rakes of outward Urea per month is for Talcher. In this regard, TFL shall clarify whether these rakes shall be for Talcher or for through out Odisha.
6. Mode of handling of Outward traffic is to be mentioned.
7. Two manned LCs are indicated at a distance of 98 meters. LCs are to be avoided by resorting to diversion, LHS/ROB/ROB
8. Siding should be designed with 25Tonne Axle Load and speed potential of siding is to be not less than 50 KMPH

Complying the above, compliance copy and revised FSR may be submitted for further processing of FSR.

(Sanjaya Mohapatra)

Chief Transportation Planning Manager

No: COM/Pig/BBS/TFL/TLHR/530

Date: 08.01.2020.

Copy to:-

1.CCM(FS), CGE, CSE, CRSE(F), CESE/ECOR/BBS - for information please.

2.DRM/KUR - for information please

3.General Manager, Talcher Fertilizers Limited, At/Po Plot No-24 Film City, Sector-16A, Noida-201301 - for information and necessary action please.

4.M/s. GM(P), RITES Ltd. Regional Project Office, Kolkatta, Metro Railway Service Building (2<sup>nd</sup> Floor), Sb. C.R. Avenue, Kolkatta-700012 - for information and necessary action please.



# ANNEX-1.8

राइट्स लि०

भारत सरकार का प्रतिष्ठान

रेलवे मंत्रालय

RITES LTD.

(A Govt. of India Enterprise)  
Ministry of Railway

CIN - L74899DL1974GOI007227

No. RITES/RPO-KOL/FR & DPR/TFL-Talcher/2020/ 2859

Date: 11.12.2020

To  
The Chief Transportation and Planning Manager  
East Coast Railway,  
Bhubaneswar.

Sub: Construction of a new Railway line in connection with TFL Siding, Talcher Fertilizer Limited, Talcher. Reg. **amended** "REVISED Feasibility Report".

- Ref: (i) Work Order No. TFL/Noida/Proj/Railway/LOA-007/2019-20/ dated 30<sup>th</sup> May, 2019.  
(ii) Revised FSR letter no. RITES/RPO-KOL/FR & DPR/TFL-Talcher/2020/1725,  
Dt. 01.09.2020  
(iii) MOM held on 07.01.2020 at HQ/Eco. Rly &  
(iv) MOM on 15.10.2020 at Divn. of Eco. Rly.

Dear Sir,

We are pleased to submit the **amended** "REVISED Feasibility Report" for Construction of the proposed new Railway line in connection with TFL Siding, Talcher Fertilizer Limited, Talcher.

In terms of work order issued vide letter reference (i) above and subsequent MOM dated 07.01.2020 under reference (iii) above, the **REVISED Feasibility Report** was submitted along with the provision for execution the work in two Phases i.e. Phase-I & Phase-II as desired by Client. :

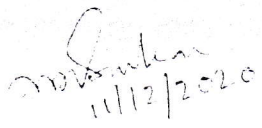
On scrutiny of the **REVISED Feasibility Report**, a meeting was held in the office of DRM/Eco. Railway on 15.10.2020 along with TFL & RITES representative. AS per discussion & MOM dated, 16.10.2020, the project will be executed in one phase only.

Based on the MOM, **Amended REVISED Feasibility Report** has been prepared and submitted for your in-principle approval.

Anticipated cost of the project duly worked out on the basis of updated cost of men & material has been incorporated in the Report.

You are requested to convey the approval at the earliest.

Thanking You,

  
(P.R. Sarkar)  
Sr Dy. General Manager(C)  
For General Manager (P)

Encl: 2(two) copies of Amended REVISED "Feasibility Report" Yours faithfully,

Copy to:

- The Divisional Railway Manager, East Coast Rly., Khurda Road, Odisha- With the request to obtain "In-Principle" approval on the Revised RFR (2 copies of Amended REVISED "Feasibility Report" is attached).
- The Additional General Manager (PDIL) - Amended Revised FR (3 copies) is attached).

## ANNEX-1.9

पूर्व तट रेलवे/East Coast Railway

Office of the  
Principal Chief Operations Manager  
Rail Sadan, Ground Floor, South Block,  
Bhubaneswar - 751 017.  
Date: 18.03.2021.

No. COM/Plg./BBS/TFL/TLHR/530

Divisional Railway Manager,  
East Coast Railway, Khurda Road.

**Sub: In-Principle Approval of FSR for rail connectivity to proposed siding of M/s. Talcher Fertilizer Ltd./Talcher.**

- Ref: (i) FM circular No.11 of 2016 & FM Circular No.6 of 2020.  
(ii) RITES's letter No. RITES/RPO-KOL/TFL/2019/3808 dated 27.12.2019.  
(iii) This office letter of even No. dated 08.01.2020 on the Minutes of Meeting held on 07.01.2020  
(iv) RITES's letter No. RITES/RPO-KOL/FR & DPR/TFL-Talcher/2020/2859 dated 11.12.2020.  
(v) Sr.DOM/KUR's letter No.PL-3/ Siding/TFL/FSR/TLHR/21 dated 17.02.2021.

In-Principle Approval of HQ for proposed rail connectivity to of M/s. Talcher Fertilizer Ltd./ Talcher is accorded subject to following:

- (i) No phasing of infrastructure.
- (ii) After rake is dropped at Pre Tippler Yard at in-plant siding, Side Arm Charger should be able to haul the loaded rake & no shunting by Railway engine.
- (iii) Compliance of Divisional comments as communicated vide(v) above.
- (iv) Procedure & timeline for Private Sidings as notified in FM Circular 11 of 2016 & 06 of 2020 along with corrigendum issued from time to time are adhered to. Accordingly, Para Nos. 4.15.1 & 5.0.2 of revised FSR of DEC-2020 are corrected while submitting DPR.
- (v) Deposit of codal charges by M/s TFL @ 1% of the total anticipated cost of the project & GST charges applicable thereto as per extant policy.

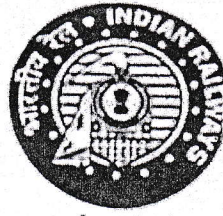
It is requested to convey the In-Principle Approval for proposed rail connectivity of M/s. Talcher Fertilizer Limited, Talcher as per FM Circular-6 of 2020, Para 1.4.3.1.

  
(Sanjaya Mahapatra)  
Chief Transportation Planning Manager.

Copy to:

- CCM(FS),CGE, CEDE,CSE & CRSE(F) for information please.
- Sr. DOM/KUR for information & necessary action.
- General Manager, Talcher Fertilizers Ltd. Plot 2/H, Kalpana Area, BJB Nagar, Khurda, Bhubaneswar-751014 for information & necessary action please.
- General Manager(P), RITES Ltd, Kolkata, Metro Railway Service Building( 2<sup>nd</sup> floor), 56, CR Avenue, Kolkatta-70012 for information & necessary action please.

कन्यालय  
मंडल रेल प्रबंधक (परिचालन)  
खोर्धा रोड  
पोस्ट-जटनी, जिला-खोर्धा,  
ओडिसा- 752050  
इ.मेल-kuroptgplg@gmail.com



पूर्व तट रेलवे  
EAST COAST RAILWAY

Office of the  
Divl. Railway Manager (Optg)  
Khurda Road  
AT/PO: Jatni  
st: Khordha  
Odisha-752050  
E.Mall:kuroptgplg@gmail.com

**ANNEX-1.10**

संख्या/ PL3/Siding/TFL/FSR/TLHR/21

दिनांक /Date: 21.05.2021

To,

The General Manager,  
M/s Talcher Fertilizer Ltd.,  
Plot-2/H, Kalpana Area,  
BJB Nagar, Bhubaneswar-751014.

विषय/Sub: In-principle approval for construction of New Railway Siding facility for  
M/s Talcher Fertilizer Ltd. at Talcher.

संदर्भ/Ref: HQrs. Letter No. COM/Plg./BBS/TFL/TLHR/530 Dtd.18.03.2021.


\*\*\*\*\*

In connection with proposed Railway Siding facility for M/s Talcher Fertilizers Limited at Talcher, In-Principle approval is hereby accorded by Competent authority with some conditions vide letter under reference. A copy of the same is enclosed herewith for your information and necessary action.

In addition, the following items should be taken care off during preparation of DPR.

- (i) Compliance of observations as mentioned in HQrs. letter under reference.
- (ii) Compliance of Divisional observations as assured vide M/s RITES Letter No.RITES/RPO-KOL/FR&DPR/TFL-TLHR/20-21 Dtd.11.02.2021 and M/s TFL Letter No.TFL/NOIDA/PROJ/Railway Siding/ECOR/01 Dtd. 12.02.2021.

Encl.: AS above

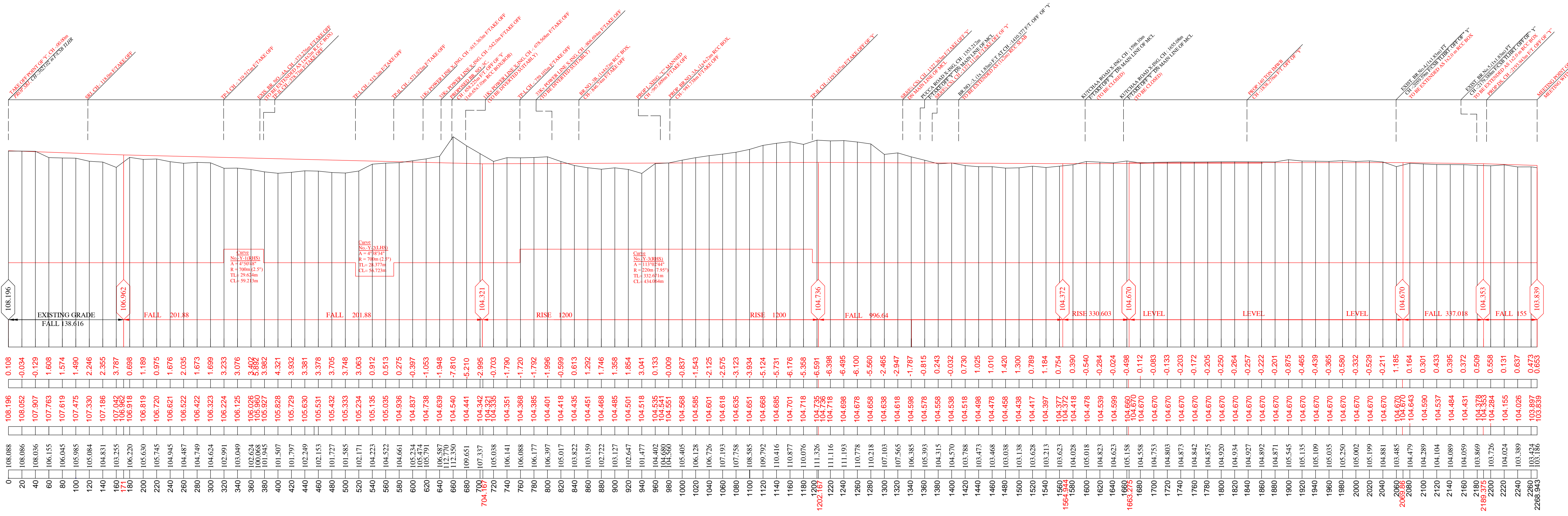
  
वरिष्ठ मंडल परिचालन प्रबंधक (स)  
Sr. Divl. Operations Manager (M)  
खोर्धा रोड  
Khurda Road

Copy to:

- Ch. OS(G) for information of DRM/KUR please.
- GM (Project), M/s Talcher Fertilizers Limited, 2<sup>nd</sup> Floor, PARC Building, Film City, Sector-16A, NOIDA-201301 for information & necessary action please.
- General Manager (P), M/s RITES, Regional Project Office, Kolkata-700012 for information and necessary action please.
- CTPM/ECOR/BBS for information please.
- Sr.DEN(Co-ord), Sr.DCM, Sr.DSTE & Sr.DEE(TRD)/KUR for information.



**ALIGNMENT (L4)**  
**GRADIENT**  
 DATUM (-) 50.00m  
**CUTTING / FILLING**  
**FORMATION LEVEL**  
**GROUND LEVEL**  
**CHAINAGE**



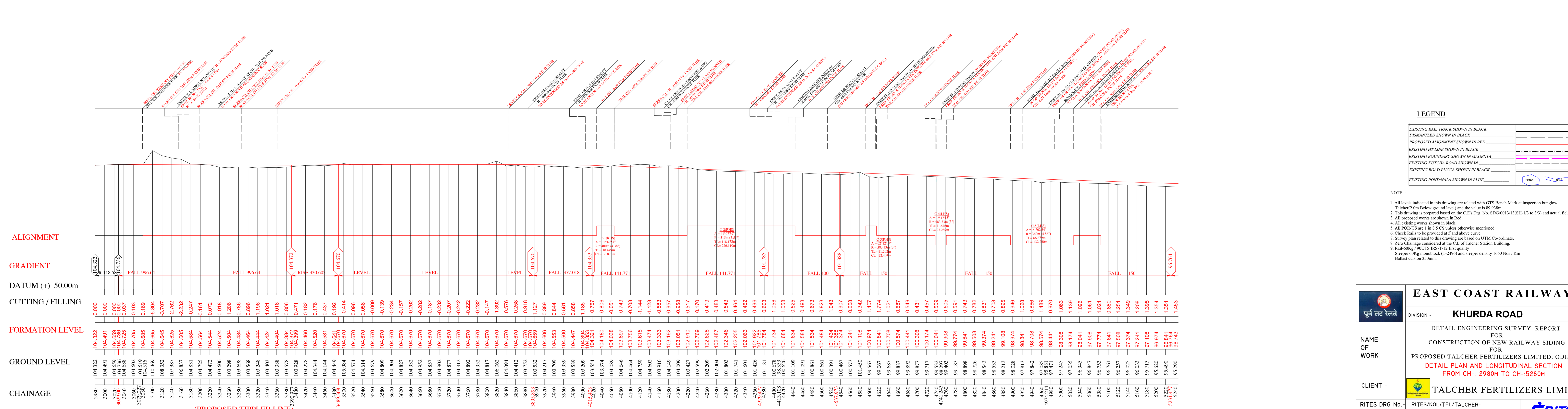
(PROPOSED Y-CONNECTION)

**LEGEND**

EXISTING RAIL TRACK SHOWN IN BLACK	
DEMOUNTED SHOWN IN BLACK	
PROPOSED ALIGNMENT SHOWN IN RED	
EXISTING HT LINE SHOWN IN BLACK	
EXISTING BOUNDARY SHOWN IN MAGENTA	
EXISTING KUTCHA ROAD SHOWN IN	
EXISTING ROAD PECCA SHOWN IN BLACK	
EXISTING POND/NALA SHOWN IN BLUE	

- NOTE :-**
- All levels indicated in this drawing are related with GTS Bench Mark at inspection banglow Talcher, 0m Below ground level and the value is 99.930m.
  - This drawing is prepared based on the C.S. No. 2779/16, and actual field survey.
  - All proposed works are shown in Red.
  - All existing works shown in Black.
  - All POINTS are 1 in 85 CS unless otherwise mentioned.
  - Check Rafts to be provided as 2'and above cover.
  - Survey plan related to this drawing are based on UTM Co-ordinate.
  - Zona Chaining considered as C.I. of Talcher Station Building.
  - Rail 60kg + 90LTS IRS T-12 first quality.
  - Sleeper 60kg monoblock (T-2060) and sleeper density 1600 Nos / Km.
  - Ballast cushion 350mm.

	<b>EAST COAST RAILWAY</b>	
	DIVISION - <b>KHURDA ROAD</b>	
NAME OF WORK	DETAIL ENGINEERING SURVEY REPORT FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA	
	<b>DETAIL PLAN AND LONGITUDINAL SECTION FOR 'Y' CONNECTION</b>	
	CLIENT - <b>TALCHER FERTILIZERS LIMITED</b>	
RITES DRG No.-	RITES/KOL/TF/L/TALCHER-	
SCALE:-	SH. NO.	I OF 4
H = 1:2500 V = 1:500	REV.	DATE:
	AUG' 2021	

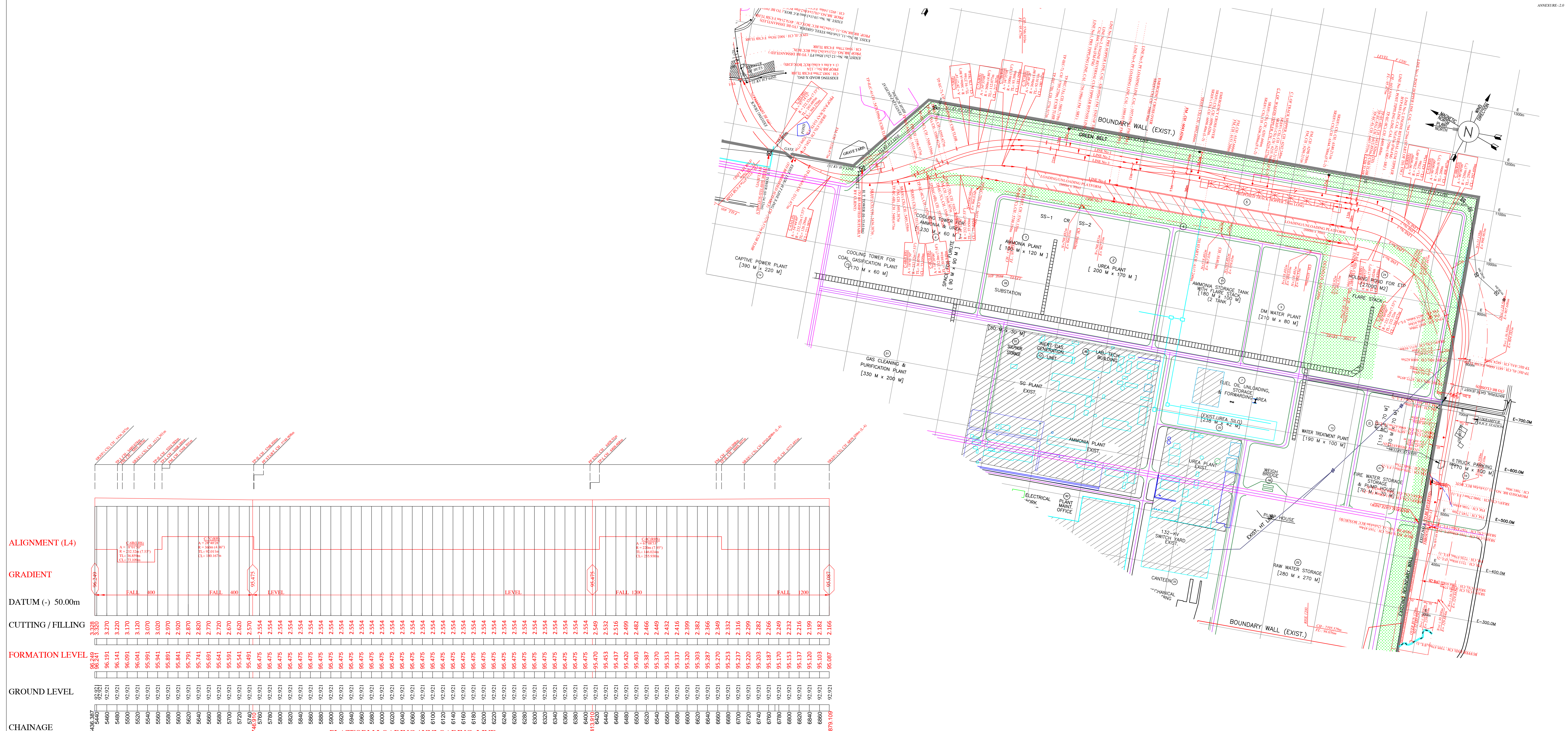


LEGEND

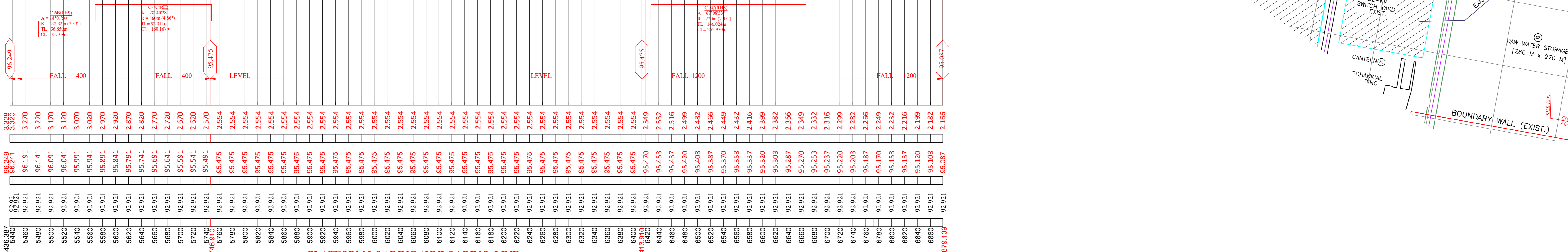
Table defining symbols for existing rail tracks, disused alignments, proposed alignments, existing HT lines, existing boundary walls, existing kutcha roads, and existing pond/nala.

- NOTE: 1. All levels indicated in this drawing are related with GTS Bench Mark at inspection bungalow Talcher 2.0m below ground level and the value is 89.938m. 2. This drawing is prepared based on the C.E's Dwg. No. SDG/0013/13SH-1/3 to 3/3 and actual field survey. 3. All proposed works are shown in Red. 4. All existing works shown in black. 5. All POINTS are 1 in 8.5 CS unless otherwise mentioned. 6. Check Rails to be provided as 5' and above curve. 7. Survey plan related to this drawing are based on UTM Coordinate. 8. Zero Chaining considered at the C.I. of Talcher Station Building. 9. Rail 60Kg/90TMS IRS-1-12 first quality Sloper 60Kg monoblock (E-2060) and sleeper density 1660 Nos./Km Ballast cushion 350mm.

Project information block including client name (TALCHER FERTILIZERS LIMITED), project title (CONSTRUCTION OF NEW RAILWAY SIDING), and drawing details (SCALE, REV, DATE).

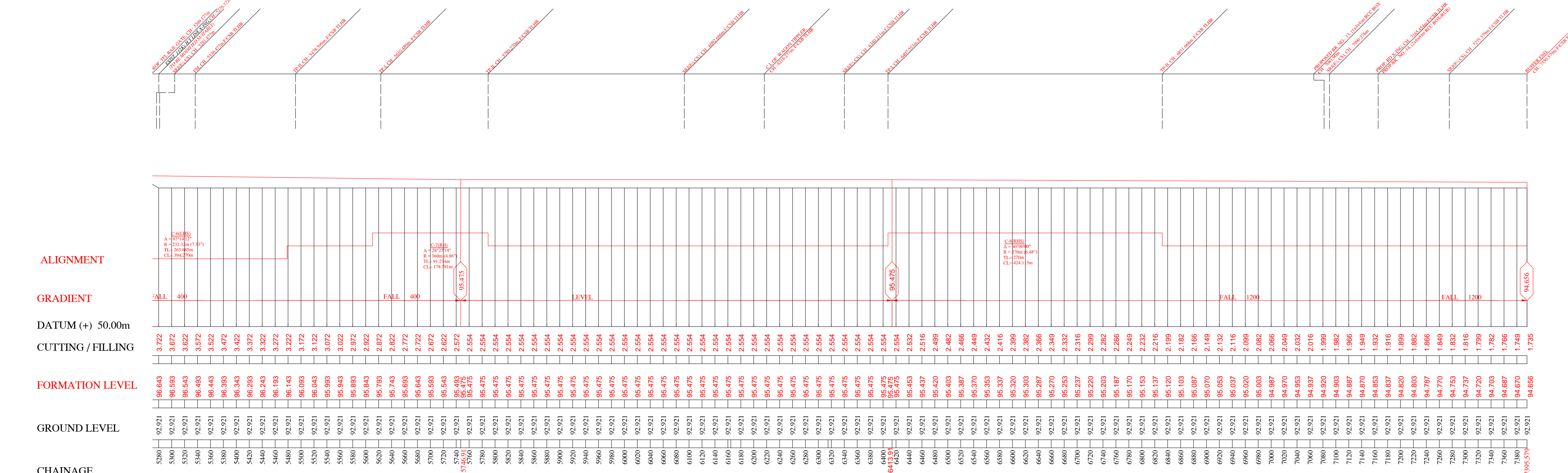


ALIGNMENT (L4)  
 GRADIENT  
 DATUM (-) 50.00m  
 CUTTING / FILLING  
 FORMATION LEVEL  
 GROUND LEVEL  
 CHAINAGE



PLATFORM LOADING / UNLOADING LINE

ALIGNMENT  
 GRADIENT  
 DATUM (+) 50.00m  
 CUTTING / FILLING  
 FORMATION LEVEL  
 GROUND LEVEL  
 CHAINAGE



(PROPOSED TIPPLER LINE)

(PROPOSED TIPPLER LINE)

**LEGEND**

- EXISTING RAIL TRACK SHOWN IN BLACK
- DISMANTLED SHOWN IN BLACK
- PROPOSED ALIGNMENT SHOWN IN RED
- EXISTING HT LINE SHOWN IN BLACK
- EXISTING BOUNDARY SHOWN IN MAGENTA
- EXISTING KUTCHA ROAD SHOWN IN BLACK
- EXISTING ROAD PUCCHA SHOWN IN BLACK
- EXISTING POND/NALA SHOWN IN BLUE

- NOTE :-**
- All levels indicated in this drawing are related with GTS Bench Mark at inspection banglow Talcher 2.0m Below ground level and the value is 89.938m.
  - This drawing is prepared based on the C.P.'s Dwg. No. SDC/0013/13SH-1/3 to 3/3 and actual field survey.
  - All proposed works are shown in Red.
  - All existing works shown in black.
  - All POINTS are 1 in 8.5 CS unless otherwise mentioned.
  - Check Racks to be provided at 5' and above curve.
  - Survey plan related to this drawing are based on UTM Co-ordinate.
  - Zero Change considered at the C.L of Talcher Station Building.
  - Rail-60kg / SLEETS IRIS-T-12 first quality.
  - Sleeper 60kg monoblock (T-2496) and sleeper density 1660 Nos / Km.
  - Ballast cushion 350mm.

		<b>EAST COAST RAILWAY</b>	
DIVISION -		<b>KHURDA ROAD</b>	
DETAIL ENGINEERING SURVEY REPORT			
FOR			
CONSTRUCTION OF NEW RAILWAY SIDING			
FOR			
PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA			
DETAIL PLAN AND LONGITUDINAL SECTION			
FROM CH - 5280.0m TO CH - 7395.579m			
PLATFORM LOADING LINE			
CLIENT -			
TALCHER FERTILIZERS LIMITED			
RITES DRG No. -	RITES/KOL/TF/L/TALCHER-		
SCALE -	SH. No.	3 OF 4	
H = 1:2500	REV.		
V = 1:500	DATE:	AUG' 2021	
		RITES LIMITED	
		(A GOVT. OF INDIA ENTERPRISE)	



ALIGNMENT

GRADIENT

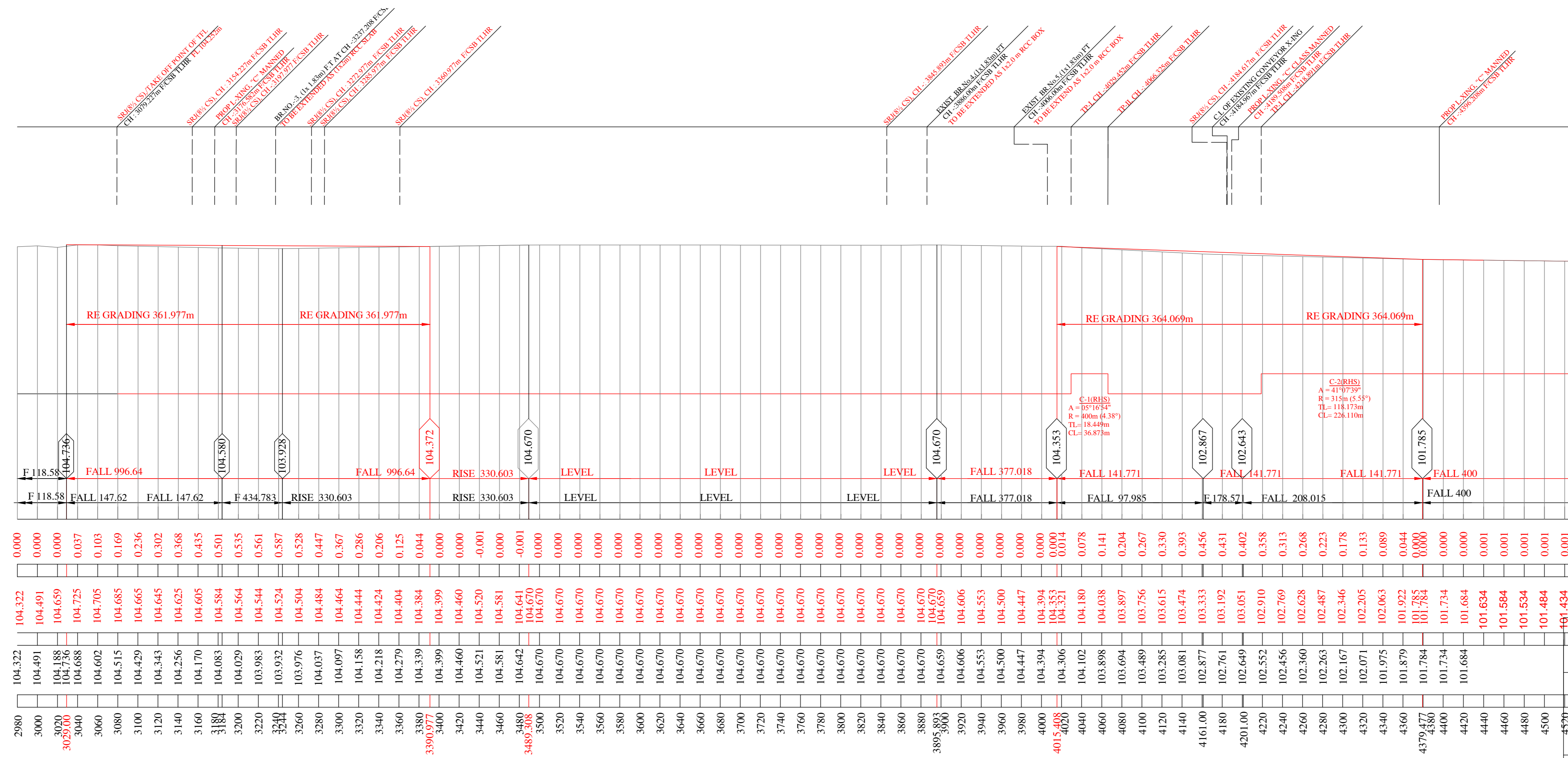
DATUM (+) 50.00m

CUTTING / FILLING

FORMATION LEVEL

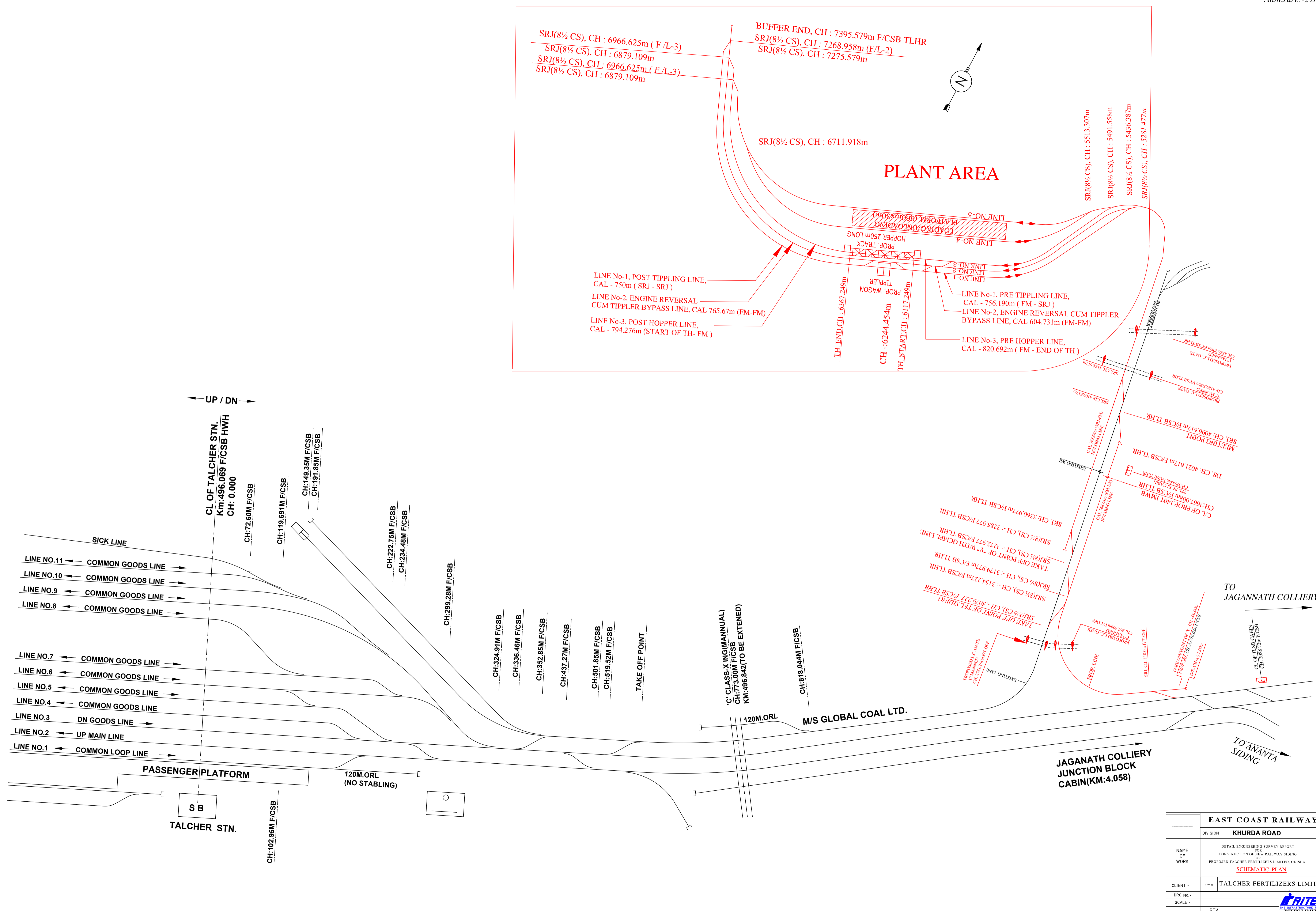
EXISTING FORMATION LEVEL

CHAINAGE



EXISTING GCMPL SIDING LINE RE GRADING LONGITUDINAL SECTION

<b>EAST COAST RAILWAY</b>	
DIVISION -	<b>KHURDA ROAD</b>
DETAIL ENGINEERING SURVEY REPORT FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA	
<b>PROPOSED REGRADING SECTION</b>	
CLIENT -	<b>TALCHER FERTILIZERS LIMITED</b>
RITES DRG No.-	RITES/KOL/TFL/TALCHER-
SCALE:-	SH. No. <b>4 OF 4</b>
H = 1:2500 V = 1:500	REV. DATE: <b>AUG' 2021</b>
<b>RITES LIMITED</b> (A GOVT. OF INDIA ENTERPRISE)	



<b>EAST COAST RAILWAY</b>	
DIVISION	<b>KHURDA ROAD</b>
NAME OF WORK	DETAIL ENGINEERING SURVEY REPORT FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA <b><u>SCHEMATIC PLAN</u></b>
CLIENT -	TALCHER FERTILIZERS LIMITED
DRG No. -	
SCALE -	
NOT TO SCALE	REV. DATE: AUG - 2021



**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**LIST OF BENCH MARK**

Sl. No.	TBM No.	RL [In m]	LOCATION	Remarks
1	MOTHER BM	89.938m	GTS BENCH MARK AT TALCHER INSPECTION BUNGLOW (2.0M BELOW GROUND LEVEL)	
2	TBM-3	82.340m	ON TOP OF TALCHER PLATFORM NO.1 , TOWARDS CUTTACK	
3	TBM-2	85.860m	ON TOP OF BRIDGE PARAPET, NEAR L-XING, NEAR MST -GBL-O/1	
4	TBM-A1	97.651m	ON TOP OF BRIDGE PARAPET NEAR SHAMSHAN	
5	TBM-A2	102.605m	ON TOP OF BRIDGE PARAPET, IN BETWEEN MAST NO- 2/17 TO 2/16, NEAR ANANTA COLONY	
6	TBM-A3	105.546m	ON TOP OF BRIDGE, IN BETWEEN MAST NO- 3/21 TO 3/20	
7	BM-3	101.952m	ON TOP OF BRIDGE, NEAR MAST NO-4/9	
8	TBM-12	100.561m	ON TOP OF BRIDGE	
9	TBM-A4	97.436m	ON TOP OF BRIDGE NEAR MUNDA BASTI	
10	TBM-1	95.404m	ON TOP OF BENCH MARK PILLAR BESIDE HEAVY WATER PLANT	
11	TBM-A5	94.219m	ON TOP OF STAIR IN FRONT OF FCI PLANT OFFICE, BESIDE HEAVY WATER PLANT	
12	TBM-Y1	104.192m	BELOW ROB ON TOP OF BRIDGE FOUNDATION	
13	TBM-Y2	110.975m	ON STEP OF TLSB CABIN	

**NOTE:-** Difference in between TFL BM and Railways Mother BM is 921mm.  
Railways Mother BM value is higher.

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**GRADIENT STATEMENT  
PROPOSED TIPPLER LINE**

Total Length of Line = 4316.352m

Sl. No.	Chainage in 'm'		Length in 'm'	Grade	Remarks
	From	To			
01	3079.227	3390.977	311.75	1 IN 996.64	FALL
02	3390.977	3489.308	98.331	330.603	RISE
03	3489.308	3895.893	406.585	LEVEL	LEVEL
04	3895.893	4015.408	119.515	1 IN 377.018	FALL
05	4015.408	4435.158	419.75	1 IN 155	FALL
06	4435.158	4537.973	102.815	1 IN 400	FALL
07	4537.973	5200.00	662.027	1 IN 200	FALL
08	5200.00	5600.00	400.00	1 IN 400	FALL
09	5600.00	7395.579	1795.579	1 IN 1200	FALL

**GRADIENT STATEMENT  
PLATFORM**

Total Length of Line = 1442.722 m

Sl. No.	Chainage in 'm'		Length in 'm'	Grade	Remarks
	From	To			
01	5436.387	5600.00	163.613	1 IN 400	FALL
02	5600.00	6879.109	1279.109	1 IN 1200	FALL

**GRADIENT STATEMENT  
PROPOSED Y-CONNECTION**

Total Length of Line = 2268.943 m

Sl. No.	Chainage in 'm'		Length in (m)	Grade	Remarks
	From	To			
01	0.0	171.00	171	1 IN 138.616	FALL
02	171.00	704.167	533.167	1 IN 201.88	FALL
03	704.167	1202.167	498.00	1 IN 1200	RISE
04	1202.167	1564.944	362.777	1 IN 996.64	FALL
05	1564.944	1663.275	98.331	1 IN 330.603	RISE
06	1663.275	2069.86	406.585	LEVEL	
07	2069.86	2189.375	119.515	1 IN 337.018	FALL
08	2189.375	2268.943	79.568	1 IN 155	FALL

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**GRADIENT ABSTRACT**

**PROPOSED TIPPLER LINE**

Total Length of Line = 4316.352m

Sl. No.	Grade	Length In (m)	% of Length	Remarks
01	1 IN 155	419.75	9.724	
02	1 IN 200	662.027	15.337	
03	1 IN 330.603	98.331	2.278	
04	1 IN 377.018	119.515	2.769	
05	1 IN 400	502.815	11.649	
06	1 IN 996.64	311.75	7.222	
07	1 IN 1200	1795.579	41.599	
08	LEVEL	406.585	9.420	
	TOTAL		100 %	

**PLATFORM**

Total Length of Line = 1442.722m

Sl. No.	Grade	Length In 'm'	% of Length	Remarks
01	1 IN 400	163.613	11.34	
02	1 IN 1200	1279.109	88.659	
	Total	1442.722	100%	

**PROPOSED Y-CONNECTION**

Total Length of Line = 2268.943 m

Sl. No.	Grade	Length In 'm'	% of Length	Remarks
01	1 IN 138.616	171	7.536	
02	1 IN 155	79.568	3.507	
03	1 IN 201.88	533.167	23.498	
04	1 IN 330.603	98.331	4.338	
05	1 IN 337.018	119.515	5.267	
06	1 IN 996.64	362.777	15.989	
07	1 IN 1200	498	21.948	
08	LEVEL	406.585	17.920	
	Total	2268.943	100%	

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**LIST OF CURVE**

**PROPOSED TIPPLER LINE**

Total Length of Line = 4316.352m

Sl. No.	Curve No.	Radius of Curve In m	Chainage in 'm'		Deflection Angle	Total Length of Curve In m	Direction	Remarks
			From	To				
01	1	400.00	4029.452	4066.325	05°16'54"	36.873	RH	
02	2	315.00	4218.891	4445.001	41°07'39"	226.110	RH	
03	3	583.33	4592.612	4615.013	02°12'01"	22.401	RH	
04	4	583.33	4737.918	4761.207	02°17'15"	23.289	LH	
05	5	360	4895.333	5027.583	21°02'54"	132.250	LH	
06	6	232.32	5084.329	5478.599	97°14'12"	394.270	LH	
07	7	360	5610.489	5789.270	28°27'14"	178.781	RH	
08	8	270	6407.553	6831.668	90°00'00"	424.115	RH	

**PLATFORM**

Total Length of Line = 1442.722 m

Sl. No.	Curve No.	Radius of Curve in m	Chainage in 'm'		Deflection Angle	Total Length of Curve in 'm'	Direction	Remarks
			From	To				
01	6B	232.32	5480.673	5553.782	18°01'50"	73.109	LH	
02	7C	360	5568.183	5748.350	28°40'28"	180.167	RH	
03	8C	220	6409.468	6667.298	67°08'53"	257.830	RH	

**PROPOSED Y-CONNECTION**

Total Length of Line = 2268.943 m

Sl. No.	Curve No.	Radius of Curve In 'm'	Chainage in 'm'		Deflection Angle	Total Length of Curve In 'm'	Direction	Remarks
			From	To				
01	Y-1	700	319.517	378.73	4°50'48"	59.213	RH	
02	Y-2	700	515.200	571.923	4°38'34"	56.723	LH	
03	Y-3	220	759.103	1193.167	113°02'44"	434.064	RH	

**CURVE ABSTRACT**

**PROPOSED TIPPLER LINE**

Total Length of Line = 4316.352m

Sl. No.	Radius of Curve in (m)	No. of Each	Length in (m)	Total Degree of Curvature	% Of Curvature of Total Length of Line
01	232.32	01	394.270	7.53°	9.134%
02	270	01	424.115	6.48°	9.825%
03	315.00	01	226.110	5.55°	5.238%
04	360	02	311.031	9.72°	7.206%
05	400.00	01	36.873	4.38°	0.854%
06	583.33	02	45.69	6°	1.058%
				Total	33.315%

### PLATFORM

Total Length of Line = 1442.722 m

Sl. No.	Radius of Curve in 'm'	No. of Each	Length in 'm'	Total Degree of Curvature	% of Curvature of Total Length of Line
01	220	01	257.830	7.95°	17.871%
02	232.32	01	73.109	7.53°	5.067%
03	360	01	180.167	4.86°	12.488%
				Total	35.427%

### PROPOSED Y-CONNECTION

Total Length of Line = 2268.943 m

Sl. No.	Radius of Curve in 'm'	No. of Each	Length in 'm'	Total Degree of Curvature	% of Curvature of Total Length of Line
01	220	01	434.064	7.95°	19.13%
02	700	02	115.936	5°	5.109%
				Total	24.239%

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**LIST OF BRIDGE  
PROPOSED TIPPLER LINE**

**MINOR BRIDGE**

Total Length of Line = 4316.352m

Sl. No.	Bridge No.	Chainage in (m)	Span in (m)	Type of Bridge	Remarks
01	2A	3176.582	1 x 4.0 x 4.0	R.C.C. Box	Road x-ing
02	3	3237.208	1 x 2.0 x 2.0	R.C.C. Box	Ex. Bridge to be Extend
03	4	3886.00	1 x 2.0 x 2.0	R.C.C. Box	Ex. Bridge to be Extend
04	5	4006.00	1 x 2.0 x 2.0	R.C.C. Box	Ex. Bridge to be Extend
05	6	4413.108	1 x 2.0 x 2.0	R.C.C. Box	Nala - Xing.
06	7	4512.43	1 x 2.0 x 2.0	R.C.C. Box	Ex. Bridge to be Extend
07	8	4612.757	1 x 2.0 x 2.0	R.C.C. Box	Nala - Xing.(Ex. Bridge to be dismantled)
08	9	4741.243	1 x 2.0 x 2.0	R.C.C. Box	Nala - Xing.(Ex. Bridge to be dismantled)
09	10	4921.144	1 x 4.0 x 2.0	R.C.C. Box	Nala - Xing.(Ex. Bridge to be dismantled)
10	11	4974.214	1 x 6.0 x 2.0	R.C.C. Box	Nala - Xing.(Ex. Bridge to be dismantled)
11	12	5040.778	1 x 4.0 x 2.0	R.C.C. Box	Nala - Xing.(Ex. Bridge to be dismantled)
12	12A	5085.278	1 x 4.0 x 4.0	R.C.C. Box	Road x-ing
13	13	7081.90	1 x 4.0 x 4.0	R.C.C. Box	Nala - Xing.
14	14	7165.454	2 x 6.0 x 6.0	R.C.C. Box	Road x-ing(RUB)

**PROPOSED Y-CONNECTION****MINOR BRIDGE**

Total Length of Line = 2268.943 m

Sl. No.	Bridge No.	Chainage in (m)	Span in (m)	Type of Bridge	Remarks
01	4A	373.276	1 x 4.0 x 4.0	R.C.C. Box	Ex. Bridge to be Extend
02	3C	658.225	1x6.65x7.0	R.C.C. Box	Road x-ing(ROB)
03	3B	846.74	1x4x2	R.C.C. Box	Balancing
04	3A	981.738	1x4x2	R.C.C. Box	Nala - Xing.



**BRIDGE ABSTRACT**  
**PROPOSED TIPPLER LINE**

**MINOR BRIDGE**

Total Length of Line = 4316.352m

Sl. No.	Type of Bridge	Span in Meter	Total No. of Span	Linear Water way in Meter
01	R.C.C. Box	2.00	7	14.0
02	R.C.C. Box	4.00	5	12.0
03	R.C.C. Box	6.00	1	6
04	R.C.C. Box	6.00	2	RUB

TOTAL LINEAR WATER WAY = 32.00m

LINEAR WATER WAY PER KILOMETRE=7.414m

**BRIDGE ABSTRACT**  
**PROPOSED Y-CONNECTION**

**MINOR BRIDGES**

Total Length of Line = 2268.943m

Sl. No.	Type of Bridge	Span in 'm'	Total No. of Span	Linear Water way in Meter
01	RCC Box	4.00	3	12.0
02	RCC Box	6.65	1	ROB

TOTAL LINEAR WATER WAY = 12.0m

LINEAR WATER WAY PER KILOMETRE = 5.2m

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**LIST OF ROAD CROSSINGS  
PROPOSED TIPPLER LINE**

Total Length of Line = 4316.352m

Sl. No.	Chainage in 'm'	Type of Xing	Remarks
01	2781.262	Road Xing	PROP. L-XING
02	3176.582	Road Xing	PROP-LHS
03	3424.210	Road Xing	ROAD TO BE CLOSED
04	3486	Road Xing	ROAD TO BE CLOSED
05	4189.508	Road Xing	PROP. L-XING
06	4396.208	Road Xing	PROP. L-XING
07	4987.928	Road Xing	ROAD TO BE CLOSED
08	5085.278	Road Xing	LHS
09	7165.454	Road Xing	RUB

**PROPOSED Y-CONNECTION**

Total Length of Line = 2268.943m

Sl. No.	Chainage in 'm'	Type of Xing	Remarks
01	658.225	Road Xing	ROB PROVIDED
02	967.609	Road Xing	PROP. L-XING

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED  
TALCHER FERTILIZERS LIMITED, ODISHA**

**PROPOSED TIPPLER LINE  
LIST OF H.T & L.T CROSSINGS**

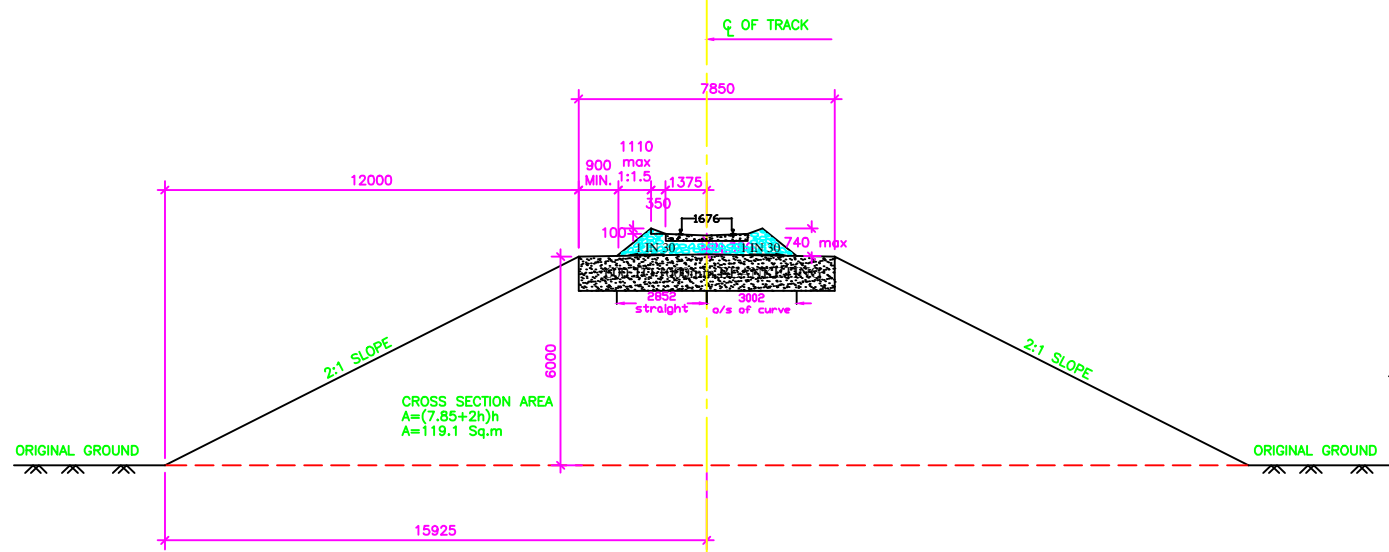
Total Length of Line = 4316.352m

Sl. No.	Chainage in 'm'	Type of Xing	Remarks
01	5276.571	132 KV HT Line X-ing	To be modified

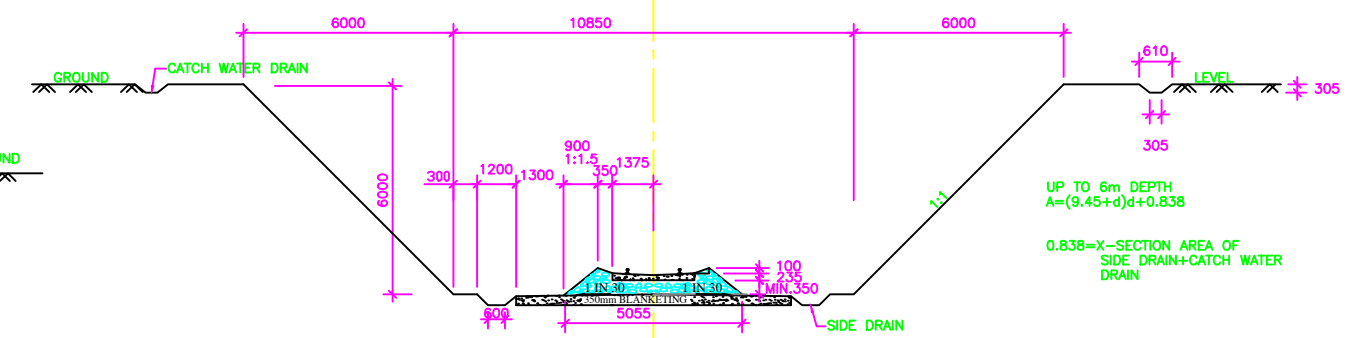
**PROPOSED Y-CONNECTION**

Total Length of Line = 2268.943m

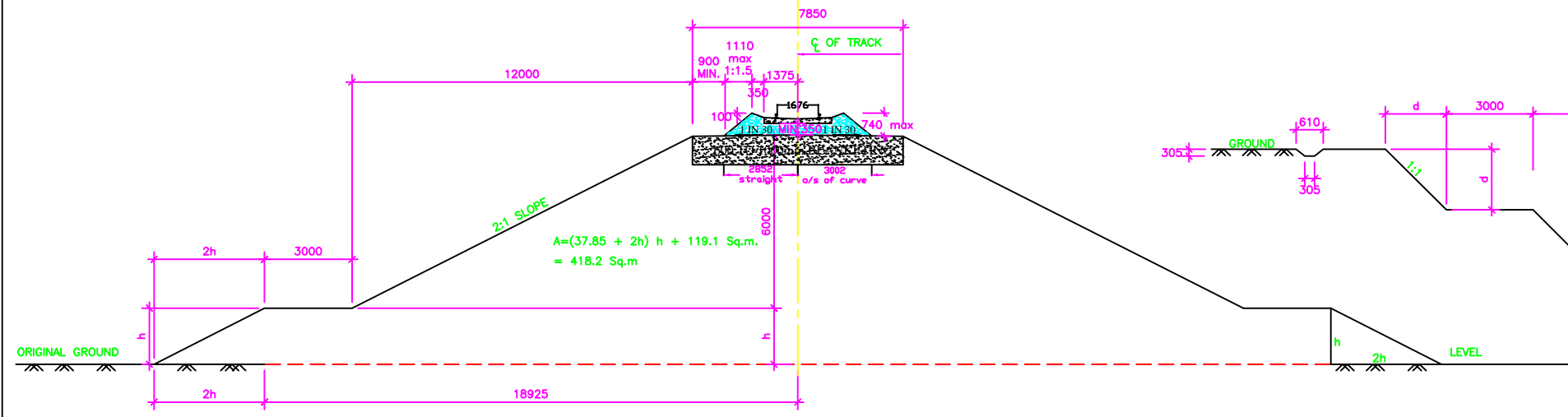
Sl. No.	Chainage in 'm'	Type of Xing	Remarks
01	31.238	11 KV HT Line X-ing	To be modified
02	615.363	11 KV HT Line X-ing	To be modified
03	628	33KV HT Line X-ing	To be modified
04	678.568	11 KV HT Line X-ing	To be modified
05	806.694	33KV HT Line X-ing	To be modified
06	943.031	11 KV HT Line X-ing	To be modified



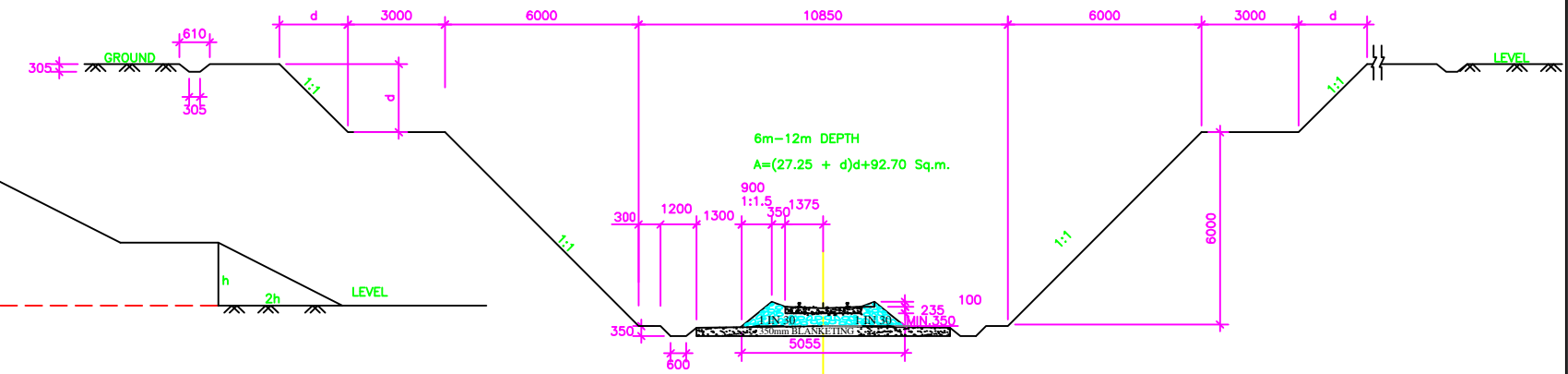
**EMBANKMENT UP TO 6m HIGH**



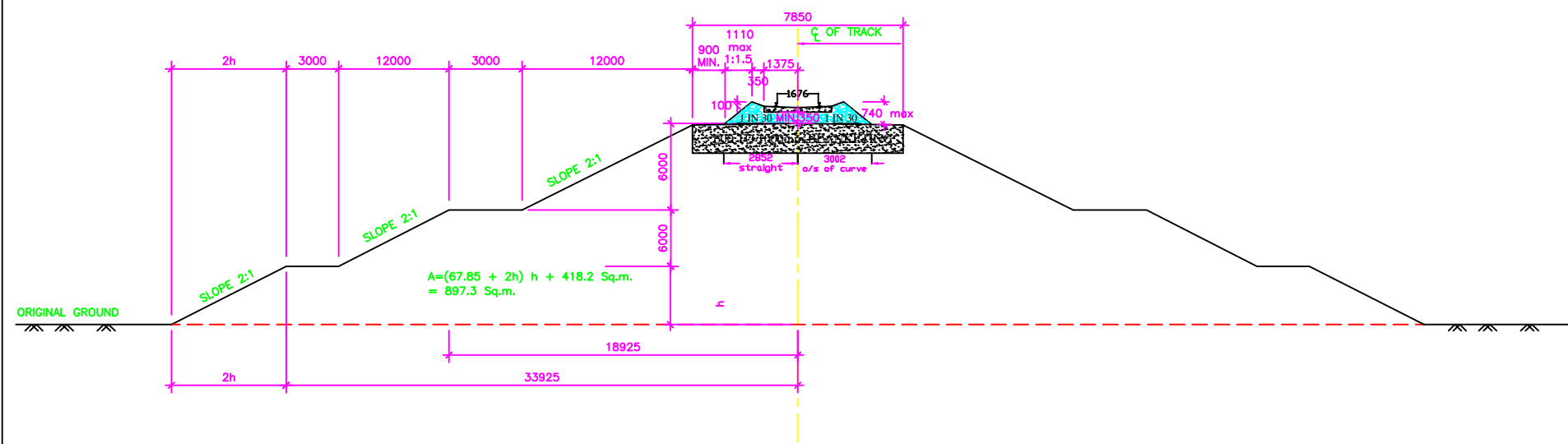
**CUTTING UP TO 6m HIGH**



**EMBANKMENT ABOVE 6m HIGH UP TO 12m HIGH**



**CUTTING ABOVE 6m DEPTH UP TO 12m DEPTH**



**EMBANKMENT ABOVE 12m HIGH UP TO 18m HIGH**

TURFING UP TO 6m (ON BOTH SIDE)  
 (a) (BANK OF HEIGHT)h x 4.47m.  
 ABOVE 6m UP TO 12m (ON BOTH SIDE)  
 (b) (h x 4.47m)+6m

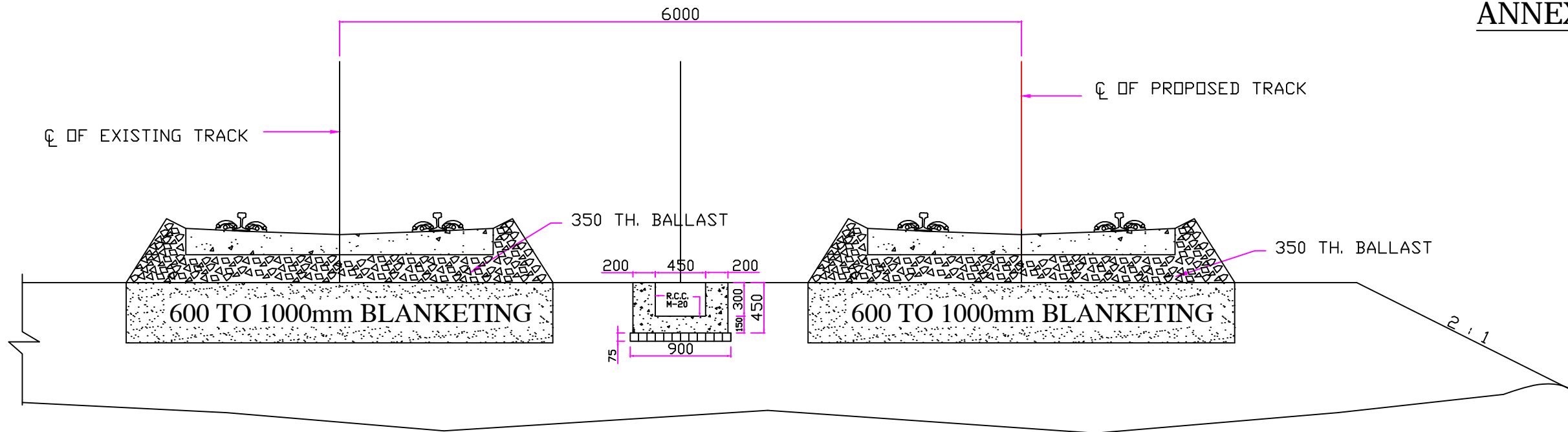
- NOTE:- 1. ALL DIMENSIONS ARE IN MILLIMETRES  
 2. AS PER RLY. BOARD LETTER No. 98/W-1/Genl./0/30-PT.-1 dt. 13.01.2015

**STANDARD DRAWING.**

TYPICAL PROFILES OF EMBANKMENT AND CUTTING

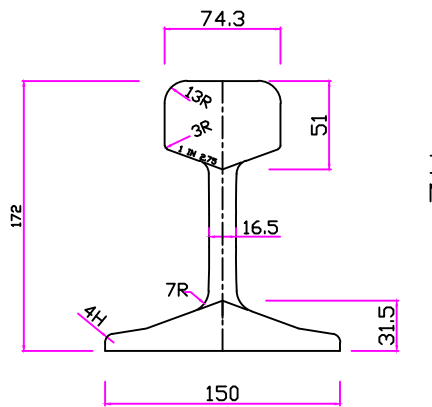
SCALE	DRG. NO.	UNITES/CAL/
NOT TO SCALE	SH. NO.	
	DATE	JANUARY 2020
	REV. NO.	



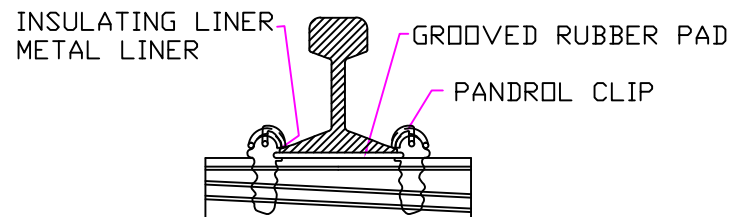


TYPICAL SECTION OF BALLAST PROFILE DOUBLE B.G. LINE

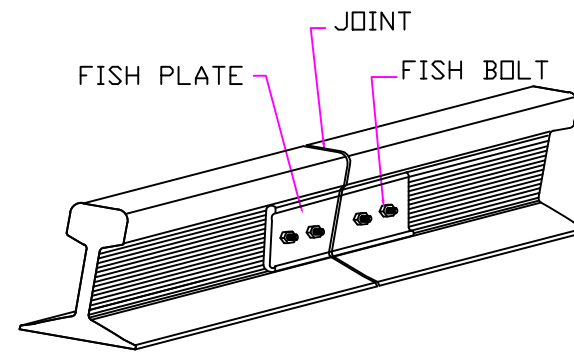
NOT TO SCALE



CROSS SECTION OF 60 Kg RAIL



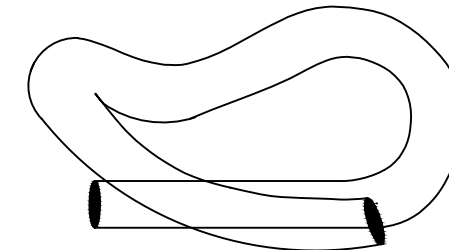
DETAILS AT RAIL SEAT



FISH PLATE

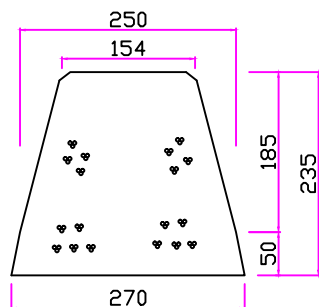
350mm Th. BALLAST  
210mm Th. SLEEPER AT RAIL SEAT  
6 mm Th. RUBBER PAD  
172mm RAIL HT.

TOTAL 738 mm. F.L TO RAIL TOP

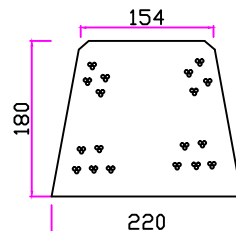


PANDROL CLIP  
SCALE - NTS

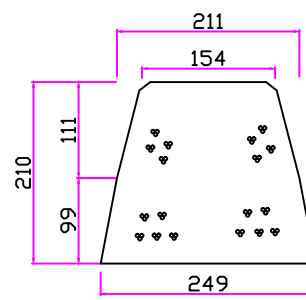
ALL DIMENSIONS ARE IN MILLIMETRES



END ELEVATION

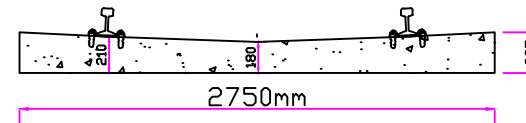


SEC. AT CENTER



SEC. AT RAIL SEAT

DETAILS AT PCS-12 SLEEPER




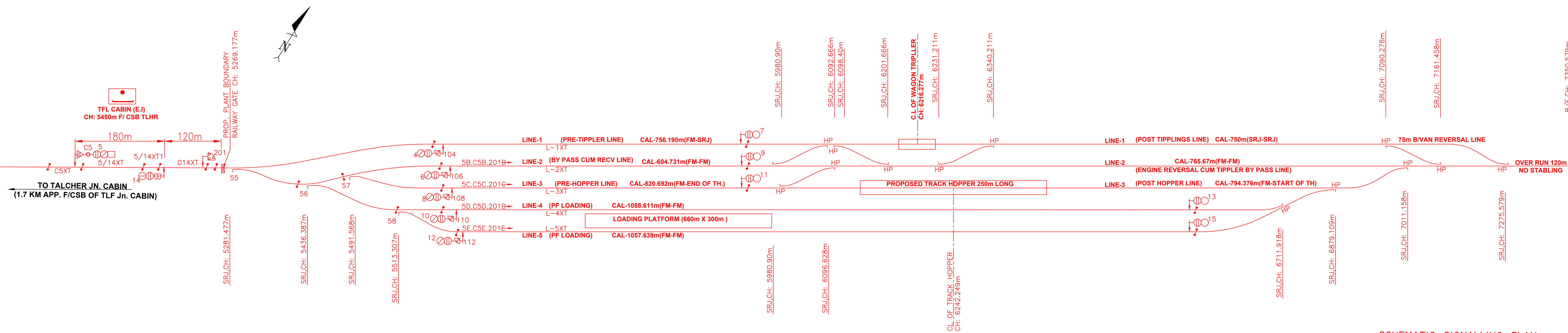
DETAILS AT MONO BLOCK P.C.S.

DETAILS OF TRACK STRUCTURE

STANDARD DRAWING.




DETAILED OF TRACK STRUCTURE 60Kg. RAIL

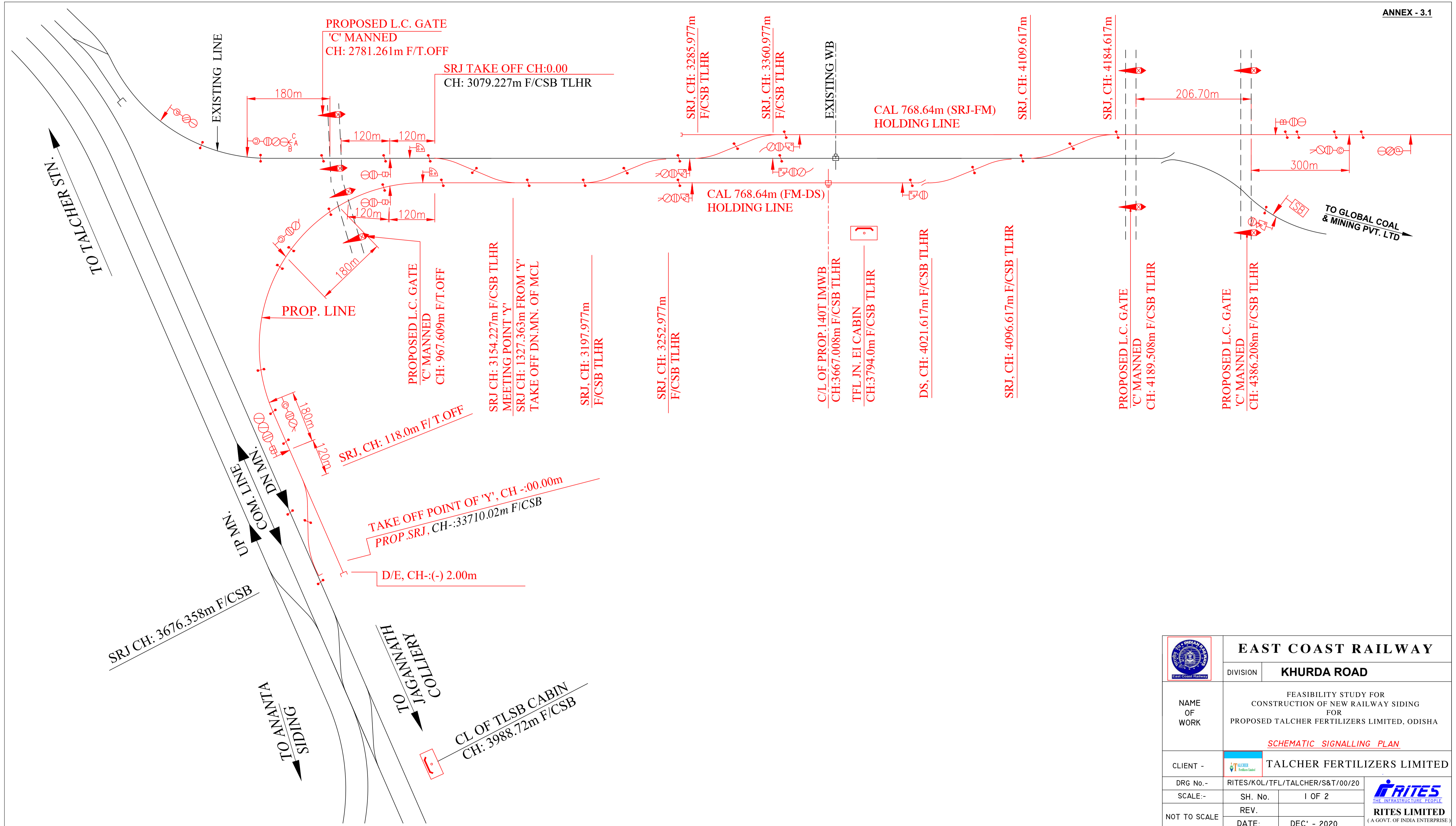
SCALE	Dr. No.	Sh. No.	Date	RITES/KOL	 <b>RITES LIMITED</b> (A GOVT. OF INDIA ENTERPRISES)
NOT TO SCALE			SEPTEMBER - 2019		
RITES LIMITED					






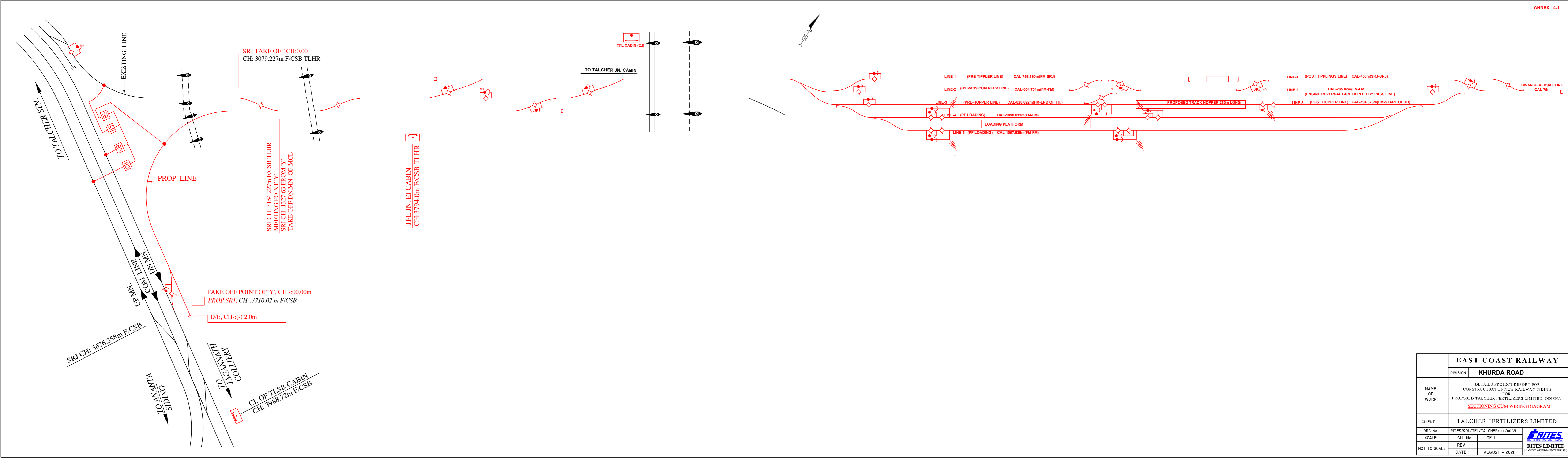
**SCHMATIC SIGNALLING PLAN OF TFL LOADING YARD**

- NOTE:-**
1. ALL POINTS ARE MOTOR OPERATED EXCEPT OTHERWISE INDICATED.
  2. ALL ANGLE OF CROSSINGS ARE 1 IN 8.5 (CS) EXCEPT OTHERWISE INDICATED.
  3. ALL SIGNAL ARE COLOR LIGHT LED LIT LAMPS.
  4. CONTROL TELEPHONE PROVIDED AT E.I CABIN.
  5. ABSOLUTE BLOCK SYSTEM OF WORKING WITH TALCHER.
  6. SINGLE LINE UFSBI WITH BPAC BETWEEN TFL EI(JN) & TFL CABIN (E.I) AND PROVIDED AT E.I CABIN.

	<b>EAST COAST RAILWAY</b>	
	DIVISION	<b>KHURDA ROAD</b>
NAME OF WORK	FEASIBILITY STUDY FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA  <i>SCHMATIC SIGNALLING PLAN</i>	
CLIENT -	 <b>TALCHER FERTILIZERS LIMITED</b>	
DRG No. -	RITES/KOL/TFL/TALCHER/S&T/00/20	
SCALE:-	SH. No.	2 OF 2
NOT TO SCALE	REV.	
	DATE:	DEC' - 2020
		 <b>RITES LIMITED</b> (A GOVT. OF INDIA ENTERPRISE)



	<b>EAST COAST RAILWAY</b>	
	DIVISION	<b>KHURDA ROAD</b>
NAME OF WORK	FEASIBILITY STUDY FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA  <i style="color: red;">SCHEMATIC SIGNALLING PLAN</i>	
CLIENT -	 <b>TALCHER FERTILIZERS LIMITED</b>	
DRG No. -	RITES/KOL/TFL/TALCHER/S&T/00/20	
SCALE:-	SH. No.	I OF 2
NOT TO SCALE	REV.	
	DATE:	DEC' - 2020
		 <b>RISES LIMITED</b> (A GOVT. OF INDIA ENTERPRISE)



<b>EAST COAST RAILWAY</b>		
DIVISION	<b>KHURDA ROAD</b>	
NAME OF WORK	DETAILS PROJECT REPORT FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA <u>SECTIONING CUM WIRING DIAGRAM</u>	
CLIENT -	TALCHER FERTILIZERS LIMITED	
DRG No. -	RITES/KOL/TFL/TALCHER/ELE/00/ZI	
SCALE -	SH. No.	1 OF 1
NOT TO SCALE	REV.	
	DATE:	AUGUST - 2021





**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**

**TOTAL COST OF THE PROJECT INCLUDING DEPARTMENTAL/CODAL CHARGES**

[Rs. In Lakh]

<b>Sl. No.</b>	<b>Type of Works</b>	<b>Basic Cost</b>	<b>Codal Charges %</b>	<b>Amount of Codal Charges (Rs.)</b>	<b>Total Rs.</b>
1	Civil Engineering	11488.65	4.00	459.55	11948.20
2	Signal Engineering & Telecommunication	2735.6	6.25	170.98	2906.58
3	Electrical Engineering (General Services)	1236.4	4.00	49.46	1285.86
4	Electrical Engineering (TRD)	2561.31	6.25	160.08	2721.39
<b>5</b>	<b>Grand Total</b>	<b>18021.96</b>		<b>840.06</b>	<b>18862.02</b>

**DETAILED PROJECT REPORT**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**  
**TOTAL COST OF THE PROJECT INCLUDING LABOUR WELFARE CESS, ENVIRONMENTAL CESS & GST**

[Rs. In Lakh]

	A	B	C	D	
Sl. No.	Basic Cost	Labour welfare cess @1% on A	Environment related charges @1% on (A + B)	GST @18% on A	Total
1	Civil Engineering 11488.65	114.89	116.04	2067.96	13787.53
2	Signal Engineering & Telecommunication 2735.6	27.36	27.63	492.41	3282.99
3	Electrical Engineering (General Services) 1236.4	12.36	12.49	222.55	1483.80
4	Electrical Engineering (TRD) 2561.31	25.61	25.87	461.04	3073.83
<b>5</b>	<b>Grand Total</b> <b>18021.96</b>	<b>180.22</b>	<b>182.02</b>	<b>3243.95</b>	<b>21628.15</b>

**DETAILED PROJECT REPORT**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**

**CIVIL ENGINEERING ESTIMATE**

Sl. No	Description of Work	Rs. in lakhs
1	Railway formation Works (8.1)	3,352.20
2	Permanent Way Works (8.2)	6,117.45
3	Bridge Works(8.3)	847.00
4	Other civil Engineering Works(8.4)	1,172.00
5	<b>Total Estimated Cost</b>	<b>11,488.65</b>
6	Labour Welfare Cess @ 1% on SI no-5	114.89
7	Provision for Environment Related works @1% on(SI no-5+SI no-6)	116.04
8	GST @ 18% on SI no-5	2,067.96
9	Codal / Departmental Charge @ 4% on SI no-5	459.55
10	<b>Grand Total including GST and other charges(SI no-5+SI no-6+SI no-7+SI no-8+SI no-9)</b>	<b>14,247.07</b>

**DETAILED PROJECT REPORT**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**  
**CIVIL ENGINEERING ESTIMATE**  
**RAILWAY FORMATION WORK**

Sl. No	Description of items	Unit	Qty	Amount in Rs.	
				Rate	Cost
1	Preliminary expenses for survey, soil test etc.	L.S.			550,000.00
2	Site clearance including cutting of small trees & removal of grass, shrubs etc.	sqm	240,000.00	18.65	4,476,000.00
3	Felling trees of girth (measured at height of 1m above ground level) including lead and stacking of material within 100m;Girth over 60cm and up to 1.5m	Each	23	845.84	19,454.32
4	Earthwork in cutting in formation including side drain, trolley refuges, etc in all conditions and classifications of soil except rock,leading and spreading to adjacent bank and disposal of surplus earth if any, including all lead lift complete.	cum	25,000.00	137.57	3,439,250.00
5	Earthwork in cutting in formation including side drain, trolley refuges, etc in <u>Soft rock</u> not requiring blasting in all conditions	cum	6,000.00	308.07	1,848,420.00
6	Earthwork in filling in embankment with earth arranged by contractor including all leads & lift etc.	cum	500,000.00	310.00	155,000,000.00
7	Supplying & spreading of stone dust on top of new formation with contractor own labour & materials equipment & machinery including compaction.	cum	85,000.00	1,730.93	147,129,050.00
8	Mechanical compaction of earth in formation with contractor own plant and machinery.	cum	500,000.00	18.12	9,060,000.00
9	Turfing in slopes with contractors grass sods 100mm thick & 200mm square including all leads & lifts transportation and watering the same till it holds the ground firmly.	sqm	80,000.00	58.72	4,697,600.00
10	Construction of Side Drain	Rm	2,000.00	4,500.00	9,000,000.00
<b>TOTAL:</b>					<b>335,219,774.32</b>

**DETAILED PROJECT REPORT  
FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**

**CIVIL ENGINEERING ESTIMATE  
PERMANENT WAY WORKS**

Sl. No	Description of items	Unit	Qty	Amount in Rs.	
				Rate	Cost
1	Laying and linking of BG straight & curve Track with new 60 Kg (IRS T-12) 90 UTS First Quality Rail on PSC sleepers (1660 Nos/Km ) with cost of Rail and standard fitting with 350 mm Ballast cushion including 4 round through packing complete.	TM	15000	26,000.00	390,000,000.00
2	Assembling Laying and linking of BG curve track 5° & above with 60 Kg (IRS T-12) 90 UTS First Quality Rail (Single) on PSC sleeper (1660 Nos/Km) with one extra at ataggered joint on Ballast cushion 350 mm including 4 round through packing & check rail fitting complete in all respect.	TM	4,200	30,000.00	126,000,000.00
3	Assembling Laying & Linking 1 in 12 P & C fan shape with new 60 Kg (IRS T-12) 90 UTS First Quality lead Rail including PSC Sleeper on ballast cushion 350 mm including 4 round through packing.	SET	28	2,300,000.00	64,400,000.00
4	Assembling Laying & Linking 60 Kg Derailing Switch (1 in 8.5) Fan Shape including PSC Sleeper on ballast cushion 350 mm including 4 round through packing.	SET	2	750,000.00	1,500,000.00
5	Making & Fixing of Fouling Mark.	EACH	28	3,500.00	98,000.00
6	Construction of Buffer End.	EACH	4	350,000.00	1,400,000.00
7	Dismantling of existing Track	TM	900	4,787.00	4,308,300.00
8	Dismantling of Points & Crossings	Set	2	18,221.00	36,442.00
9	Dismantling of Existing Buffer End etc	Nos	1	2,000.00	2,000.00
10	Construction of 6 numbers Level Crossings	Set	5	1,200,000.00	6,000,000.00
11	Regradation of existing Track	Tm	1800	10,000.00	18,000,000.00
	<b>TOTAL</b>			<b>RS</b>	<b>611,744,742.00</b>

**DETAILED PROJECT REPORT**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**

**CIVIL ENGINEERING ESTIMATE**  
**MINOR BRIDGE WORKS**

<b>A MINOR BRIDGES</b>				
<b>SL NO</b>	<b>Br. No.</b>	<b>Ch No.</b>	<b>DESCRIPTION</b>	<b>Amount</b>
1	3	3237.208	1X2mX2m RCC Box Bridge Extn.	3,000,000.00
2	4	3886	1X2mX2m RCC Box Bridge Both side Extn	4,000,000.00
3	5	4006	1X2mX2m RCC Box Bridge Extn	8,200,000.00
4	6	4413.108	1X2mX2m RCC Box Bridge Extn	3,500,000.00
5	7	4512.43	1X2mX2m RCC Box Bridge Extn	3,000,000.00
6	8	4612.757	1X2mX2m RCC Box Bridge	3,500,000.00
7	9	4741.243	1X2mX2m RCC Box Bridge	3,500,000.00
8	10	4921.144	1X4mX2m RCC Box Bridge	4,500,000.00
9	11	4974.214	1X6mX2m RCC Box Bridge	5,200,000.00
10	12	5040.778	1X4mX2m RCC Box Bridge	4,200,000.00
11	12A	5085.278	1X4mX4m RCC Box Bridge	4,500,000.00
12	13	7081.9	1X4mX4m RCC Box Bridge	4,400,000.00
13	14	7165.454	2X6mX6m RCC Box Bridge (RUB)	8,200,000.00
			<b>TOTAL(B) Rs</b>	<b>59,700,000.00</b>
<b>SL NO</b>	<b>Br. No.</b>	<b>Ch No.</b>	<b>DESCRIPTION</b>	<b>Amount</b>
<b>B MINOR BRIDGES for Y Connection</b>				
14	4A	373.216	1X4mX4m RCC Box Bridge	4,500,000.00
15	3C	658.225	1X6.65mX7.0m RCC Box(ROB)	11,500,000.00
16	3B	846.74	1X4mX2m RCC Box Bridge	4,500,000.00
17	3A	981.738	1X4mX2m RCC Box Bridge	4,500,000.00
			<b>TOTAL(B) Rs</b>	<b>25,000,000.00</b>
			<b>Total cost of A +B</b>	<b>84,700,000.00</b>

**DETAILED PROJECT REPORT**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR PROPOSED TALCHER FERTILIZERS LIMITED, ODISHA**

**CIVIL ENGINEERING ESTIMATE**  
**OTHER CIVIL ENGINEERING WORKS**

Sl. No.	Description of items of work	Unit	Qty.	Amount in Rs.	
				Rate	Cost
1	<b>For Civil Works</b>				
(i)	Dismaling works	LS			200,000.00
(ii)	Construction of Two EI Cabin Building	sqm	600	35,000.00	21,000,000.00
(iii)	Diversion of Service Road	Rm	2,500.00	15,000.00	37,500,000.00
(iv)	Construction of Loading Platform(660mX30m)	LS			30,000,000.00
(v)	Nala Diversion Works	Rm	2000	5,000.00	10,000,000.00
(VI)	Construction of one weigh Bridge	LS			5,000,000.00
(vii)	Cost for lifting Conveyor Belt	LS			13,500,000.00
	<b>Total :</b>				<b>117,200,000.00</b>

**DETAIL PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**

Summary of Abstract Cost Estimate for Installation of Talcher New Inplant Loading Yard E.I.Cabin ,TFL Jn.E.I.Cabin and Alteration work in TLHR & TLSB cabin of Talcher in connection with Construction of NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.

		[Rs. In lakhs]		
SI No.	Name of the work	Within Railway land	Outside Railway land	TOTAL
1	Talcher New Inplant Loading Yard E.I.Cabin	0.00	976.14	976.14
2	Talcher Junction E.I.Cabin	0.00	1,462.50	1,462.50
3	Alteration work in Talcher (TLHR) cabin	148.48	0.00	148.48
4	Alteration work in Talcher (TLSB) cabin	148.48	0.00	148.48
	<b>Total</b>	296.96	2,438.64	<b>2,735.60</b>
5	GST @ 18%	53.45	438.95	492.41
6	Labour Welfare Cess @1%	2.97	24.39	27.36
7	Enviromental Related Charge @1% (on Basic amount +Labour welfare cess)	3.00	24.63	27.63
8	Departmental Charge @ 6.25%	18.56	152.41	170.97
	<b>Grand Total</b>	374.94	3,079.03	<b>3,453.97</b>
<b>N.B</b>	<i>The cost of Electrical&amp; Civil portion associated with S&amp;T works has been included in the Electrical and Engineering Estimates respectively.</i>			



**DETAILED PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**  
**COST OF NEW INPLANT CENTRALIZED E.I.CABIN AT PROPOSED LOADING YARD.**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
1	Design, Manufacturing, Supply, Testing(cluding FAT, SAT) and commisioning of Centralized Type EI System (HOT Stand by) complete which includes supply of Interlocking Equipments, DC-DC Convertos,Relay Racks,Panel/Fascilities,earthing materials, Lighting Arrestors AC/DC, surge protection,etc. this also includes supply of spares@10% of EI modules	1	LS	45,000,000.00	45000000.00
2	Electrical Point Machine complete with ground connection	10	Nos.	97,000.00	970000.00
3	Electric Key Transmitter ( EKT)	10	Nos.	7,800.00	78000.00
4	MACLS complete with all accessories with LED lit				
	i) 2 Aspect	14	Nos.	56,000.00	784000.00
	ii) 3 Aspect	1	Nos.	68,000.00	68000.00
	iii) Route 4 Way	1	Nos.	190,000.00	190000.00
	vi)C/ON	3	Nos.	15,000.00	45000.00
5	Independent Shunt Signal with LED lit	5	No.	44,100.00	220500.00
6	Dependent Shunt Signal with LED lit	7	Nos.	28,000.00	196000.00
7	Underground Signalling Cable PVC insulated				
	i)12 Core	50	Km.	221,000.00	11050000.00
	ii) 6 Core	5	Km.	134,000.00	670000.00
8	Copper Power cable 2C - 10 sq. mm	4	Km.	136,000.00	544000.00
9	6 Quad Telecom cable	10	Km.	321,500.00	3215000.00
10	24 Fiber armoured Optical Fiber Cable.	5	Km.	108,500.00	542500.00
11	Supply of HDPE Duct	5	Km.	47,500.00	237500.00
12	OFC Joint enclosure	5	Nos.	9,100.00	45500.00
13	OFC Equipment	1	No	177,000.00	177000.00
14	Stop Board	5	Nos.	3,950.00	19750.00
15	Cable indoor copper conductor plain annealed high conductivity 650V grade PVC insulated unarmoured IRS-S-76/89.				
	i) -do- 3 x 0.75 sq.mm	10	Coil (100M each)	1,200.00	12000.00
	ii) -do- 16 x 0.2 sq.mm	100	Coil (100M each)	650.00	65000.00
	iii) -do- 7 x 0.75 sq.mm	5	Coil (100M each)	3,400.00	17000.00
16	(i) Switch Board Cable 30 pair conductor dia 0.63 mm	500	Mtrs	112.50	56250.00
	(ii) Switch Board Cable 30 pair conductor dia 1.00 mm	0.5	Km.	180,000.00	90000.00
17	Signalling Relay of sorts	400	Nos.	5,500.00	2200000.00
18	Integrated Power supply ( IPS)	1	LS	1,197,500.00	1197500.00
19	Steel Apparatus case	50	Nos.	14,000.00	700000.00
20	Data logger	1	LS	797,000.00	797000.00
21	Cable Termination Rack (CTR)	3	Nos.	8,500.00	25500.00
22	Relay Rack	0	Nos.	17,500.00	0.00
23	Earth Electrode with MS Flat	50	Nos.	2,100.00	105000.00
24	DWC Pipe	2000	mts	402.00	804000.00
25	G,I,Pipe	100	mts	1,100.00	110000.00

**DETAILED PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**  
**COST OF NEW INPLANT CENTRALIZED E.I.CABIN AT PROPOSED LOADING YARD.**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
26	Multisection Digital Axle Counter for 30DP./21TS .	30	DP	583,000.00	17490000.00
27	Supply & Execution of Earthing (Ring Earthing with Minimum Ten Earth Electrodes around Cabin. Building) of EI equipments along with Supply of all Required material as per RDSO/SPN/197/2008 VERSION 1.0 OR LATEST (With Latest Amendment) as per RDSO TAN no.STS/E/TAN/3006 dt.02.11.2012.,Supply of all requistes materials as per latest RDSO guide line.	1	Set	500,000.00	500000.00
28	High Availability Single Section Digital Axle counter (HASSDAC)	1	Set	944,000.00	944000.00
29	UFSBI Single Line	1	Set	982,000.00	982000.00
30	Wiring and terminating materials	1	LS	200,000.00	200000.00
31	Cable terminating materials	1	LS	300,000.00	300000.00
32	Building materials (sand, cement etc.)	1	LS	200,000.00	200000.00
33	4w DTMF Equpt. With all accessories	4	Nos.	12,500.00	50000.00
34	PA System	1	set	19,000.00	19000.00
35	25 Watt VHF set with all accessories including power pack	1	No	35,500.00	35500.00
36	5 Watt VHF set with all accessories	4	Nos.	22,000.00	88000.00
37	VFT	10	Nos.	7,800.00	78000.00
38	Misc. stores/Furniture	1	LS	300,000.00	300000.00
39	Paints & Consumables	1	LS	200,000.00	200000.00
40	Provision of A.C.Machine for dust proof arrangement in Panel & Relay Room.	1	LS	300,000.00	300000.00
41	Provision of Fire System at Cabin.	1	LS	350,000.00	350000.00
42	Provision of Surge Arrestor.	1	LS	100,000.00	100000.00
43	Hiring of Vehicles for Supevision work ( 24 Months)	1	LS	1,000,000.00	1000000.00
44	Electronic Magneto Telephone with accessories	6	Nos.	3,600.00	21600.00
45	PVC insulated multi- strand single core copper conductor cable 10 sq.mm.as per IRS S-76/89 (Amd.-3) or latest.	500	Mtrs.	120.00	60000.00
46	Auto Changeover LT	1	No.	55,000.00	55000.00
47	10 KVA DG set	1	Set	332,000.00	332000.00
48	Relocation of Emergency socket / Location box for Electrical works	1	LS	500,000.00	500000.00
				SUB TOTAL	94337100.00
49	Transportation,installation etc 40% on sub total of supply item	1	40%	37,734,840.00	37734840.00
50	Cable trenching, laying & refilling	10	Km.	74,000.00	740000.00
				TOTAL	132,811,940.00
				Or say Rs. In Lakh	1,328.12

N.B *The cost of Electrical& Civil portion associated with S&T works has been included in the Electrical and Engineering Estimates respectively.*

**DETAILED PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**  
**COST OF NEW INPLANT CENTRALIZED E.I.CABIN AT PROPOSED LOADING YARD.**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
1	Design, Manufacturing, Supply, Testing(including FAT, SAT) and commisioning of Centralized Type EI System (HOT Stand by) complete which includes supply of Interlocking Equipments, DC-DC Convertos,Relay Racks,Panel/Fascilities,earthing materials, Lighting Arrestors AC/DC, surge protection,etc. this also includes supply of spares@10% of EI modules	1	LS	30,000,000.00	30000000.00
2	Electrical Point Machine complete with ground connection	6	Nos.	97,000.00	582000.00
3	Electric Key Transmitter ( EKT)	6	Nos.	7,800.00	46800.00
4	MACLS complete with all accessories with LED lit				
	i) 2 Aspect	14	Nos.	56,000.00	784000.00
	ii) 3 Aspect	1	Nos.	68,000.00	68000.00
	iii) RouteTensile Type	1	Nos.	100,000.00	100000.00
	vi)C/ON	1	Nos.	15,000.00	15000.00
5	Independent Shunt Signal with LED lit	2	No.	44,100.00	88200.00
6	Dependent Shunt Signal with LED lit	6	Nos.	28,000.00	168000.00
7	Underground Signalling Cable PVC insulated				
	i)12 Core	40	Km.	221,000.00	8840000.00
	ii) 6 Core	5	Km.	134,000.00	670000.00
8	Copper Power cable 2C - 10 sq. mm	4	Km.	136,000.00	544000.00
9	6 Quad Telecom cable	10	Km.	321,500.00	3215000.00
10	24 Fiber armoured Optical Fiber Cable.	5	Km.	108,500.00	542500.00
11	Supply of HDPE Duct	5	Km.	47,500.00	237500.00
12	OFC Joint enclosure	5	Nos.	9,100.00	45500.00
13	OFC Equipment	1	No	177,000.00	177000.00
14	Stop Board	5	Nos.	3,950.00	19750.00
15	Cable indoor copper conductor plain annealed high conductivity 650V grade PVC insulated unarmoured IRS-S-76/89.				
	i) -do- 3 x 0.75 sq.mm	10	Coil (100M each)	1,200.00	12000.00
	ii) -do- 16 x 0.2 sq.mm	100	Coil (100M each)	650.00	65000.00
	iii) -do- 7 x 0.75 sq.mm	5	Coil (100M each)	3,400.00	17000.00
16	Switch Board Cable 30 pair conductor dia 0.63 mm	500	Mtrs	112.50	56250.00
17	Signalling Relay of sorts	200	Nos.	5,500.00	1100000.00
18	Integrated Power supply ( IPS)	1	LS	1,197,500.00	1197500.00
19	Steel Apparatus case	40	Nos.	14,000.00	560000.00
20	Data logger	1	LS	797,000.00	797000.00
21	Cable Termination Rack (CTR)	3	Nos.	8,500.00	25500.00
22	Relay Rack	0	Nos.	17,500.00	0.00
23	Earth Electrode with MS Flat	40	Nos.	2,100.00	84000.00
24	DWC Pipe	1500	mts	402.00	603000.00
25	G,I,Pipe	100	mts	1,100.00	110000.00

**DETAILED PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**  
**COST OF NEW INPLANT CENTRALIZED E.I.CABIN AT PROPOSED LOADING YARD.**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
26	Electric Lifting Barrier Complete set.	0	Set	550,000.00	0.00
27	Multisection Digital Axle Counter for 20DP./15TS .	20	DP	583,000.00	11660000.00
28	Supply & Execution of Earthing (Ring Earthing with Minimum Ten Earth Electrodes around Cabin. Building) of EI equipments along with Supply of all Required material as per RDSO/SPN/197/2008 VERSION 1.0 OR LATEST (With Latest Amendment) as per RDSO TAN no.STS/E/TAN/3006 dt.02.11.2012.,Supply of all requistes materials as per latest RDSO guide line.	1	Set	650,000.00	650000.00
29	High Availability Single Section Digital Axle counter (HASSDAC)	1	Set	944,000.00	944000.00
30	UFSBI Single Line	1	Set	982,000.00	982000.00
31	Wiring and terminating materials	1	LS	200,000.00	200000.00
32	Cable terminating materials	1	LS	300,000.00	300000.00
33	Building materials (sand, cement etc.)	1	LS	200,000.00	200000.00
34	4w DTMF Equpt. With all accessories	4	Nos.	12,500.00	50000.00
35	PA System	1	set	19,000.00	19000.00
36	25 Watt VHF set with all accessories including power pack	1	No	35,500.00	35500.00
37	5 Watt VHF set with all accessories	4	Nos.	22,000.00	88000.00
38	VFT	10	Nos.	7,800.00	78000.00
39	Misc. stores/Furniture	1	LS	300,000.00	300000.00
40	Paints & Consumables	1	LS	200,000.00	200000.00
41	Provision of A.C.Machine for dust proof arrangement in Panel & Relay Room.	1	LS	300,000.00	300000.00
42	Provision of Fire System at Cabin.	1	LS	350,000.00	350000.00
43	Provision of Surge Arrestor.	1	LS	100,000.00	100000.00
44	Hiring of Vehicles for Supevision work ( 24 Months)	1	LS	1,000,000.00	1000000.00
45	Electronic Magneto Telephone with accessories	6	Nos.	3,600.00	21600.00
46	PVC insulated multi- strand single core copper conductor cable 10 sq.mm.as per IRS S-76/89 (Amd.-3) or latest.	500	Mtrs.	120.00	60000.00
47	Auto Changeover LT	1	No.	55,000.00	55000.00
48	10 KVA DG set	1	Set	332,000.00	332000.00
49	Relocation of Emergency socket / Location box for Electrical works	1	LS	500,000.00	500000.00
				SUB TOTAL	69195600.00
50	Transportation,installation etc 40% on sub total of supply item	1	40%	27,678,240.00	27678240.00
51	Cable trenching, laying & refilling	10	Km.	74,000.00	740000.00
				<b>TOTAL</b>	97,613,840.00
				<b>Or say Rs. In Lakh</b>	<b>976.14</b>

N.B *The cost of Electrical& Civil portion associated with S&T works has been included in the Electrical and Engineering Estimates respectively.*

**DETAILED PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**  
**COST OF NEW TFL JN. CENTRALIZED E.I.CABIN IN CONNECTION WITH PROPOSED LOADING YARD.**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
1	Design, Manufacturing, Supply, Testing(cluding FAT, SAT) and commisioning of Centralized Type EI System (HOT Stand by) complete which includes supply of Interlocking Equipments, DC-DC Convertos,Relay Racks,Panel/Fascilities,earthing materials, Lighting Arrestors AC/DC, surge protection,etc. this also includes supply of spares@10% of EI modules	1	LS	40,000,000.00	40000000.00
2	Electrical Point Machine complete with ground connection	15	Nos.	97,000.00	1455000.00
3	Electric Key Transmitter ( EKT) Points & ELB.	20	Nos.	7,800.00	156000.00
4	MACLS complete with all accessories with LED lit				
	i) 2 Aspect	15	Nos.	56,000.00	840000.00
	ii) Route 1 Way	8	Nos.	75,000.00	600000.00
	iii) Route 2 Way	2	Nos.	110,000.00	220000.00
	vi)C/ON	4	Nos.	15,000.00	60000.00
5	Independent Shunt Signal with LED lit	3	No.	44,100.00	132300.00
6	Dependent Shunt Signal with LED lit	6	Nos.	28,000.00	168000.00
7	Underground Signalling Cable PVC insulated				
	i)12 Core	50	Km.	221,000.00	11050000.00
	ii) 6 Core	10	Km.	134,000.00	1340000.00
8	Copper Power cable 2C - 10 sq. mm	10	Km.	136,000.00	1360000.00
9	6 Quad Telecom cable	15	Km.	321,500.00	4822500.00
10	24 Fiber armoured Optical Fiber Cable.	5	Km.	108,500.00	542500.00
11	Supply of HDPE Duct	5	Km.	47,500.00	237500.00
12	OFC Joint enclosure	5	Nos.	9,100.00	45500.00
13	OFC Equipment	1	No	177,000.00	177000.00
14	Stop Board	2	Nos.	3,950.00	7900.00
15	Cable indoor copper conductor plain annealed high conductivity 650V grade PVC insulated unarmoured IRS-S-76/89.				
	i) -do- 3 x 0.75 sq.mm	10	Coil (100M each)	1,200.00	12000.00
	ii) -do- 16 x 0.2 sq.mm	150	Coil (100M each)	650.00	97500.00
	iii) -do- 7 x 0.75 sq.mm	5	Coil (100M each)	3,400.00	17000.00
16	Switch Board Cable 30 pair conductor dia 0.63 mm	500	Mtrs	112.50	56250.00
17	Signalling Relay of sorts	300	Nos.	5,500.00	1650000.00
18	Integrated Power supply ( IPS)	1	LS	1,197,500.00	1197500.00
19	Steel Apparatus case	50	Nos.	14,000.00	700000.00
20	Data logger	1	LS	797,000.00	797000.00
21	Cable Termination Rack (CTR)	3	Nos.	8,500.00	25500.00
22	Relay Rack	0	Nos.	17,500.00	0.00
23	Earth Electrode with MS Flat	50	Nos.	2,100.00	105000.00
24	DWC Pipe	2000	mts	402.00	804000.00
25	G,I,Pipe	200	mts	1,100.00	220000.00
26	Electric Lifting Barrier Complete set.	5	Set	550,000.00	2750000.00

**DETAILED PROJECT REPORT**  
**SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**  
**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED, ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**  
**COST OF NEW TFL JN. CENTRALIZED E.I.CABIN IN CONNECTION WITH PROPOSED LOADING YARD.**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
27	Multisection Digital Axle Counter for 40DP./30TS .	40	DP	583,000.00	23320000.00
28	Supply & Execution of Earthing (Ring Earthing with Minimum Ten Earth Electrodes around Cabin. Building) of EI equipments along with Supply of all Required material as per RDSO/SPN/197/2008 VERSION 1.0 OR LATEST (With Latest Amendment) as per RDSO TAN no.STS/E/TAN/3006 dt.02.11.2012.,Supply of all requistes materials as per latest RDSO guide line.	1	Set	650,000.00	650000.00
29	High Availability Single Section Digital Axle counter (HASSDAC)	2	Set	944,000.00	1888000.00
30	UFSBI Single Line	2	Set	982,000.00	1964000.00
31	Wiring and terminating materials	1	LS	200,000.00	200000.00
32	Cable terminating materials	1	LS	300,000.00	300000.00
33	Building materials (sand, cement etc.)	1	LS	200,000.00	200000.00
34	4w DTMF Eqpt. With all accessories	4	Nos.	12,500.00	50000.00
35	PA System	1	set	19,000.00	19000.00
36	25 Watt VHF set with all accessories including power pack	1	No	35,500.00	35500.00
37	5 Watt VHF set with all accessories	4	Nos.	22,000.00	88000.00
38	VFT	10	Nos.	7,800.00	78000.00
39	Misc. stores/Furniture	1	LS	300,000.00	300000.00
40	Paints & Consumables	1	LS	200,000.00	200000.00
41	Provision of A.C.Machine for dust proof arrangement in Panel & Relay Room.	1	LS	300,000.00	300000.00
42	Provision of Fire System at Cabin.	1	LS	350,000.00	350000.00
43	Provision of Surge Arrestor.	1	LS	100,000.00	100000.00
44	Hiring of Vehicles for Supevision work ( 24 Months)	1	LS	1,000,000.00	1000000.00
45	Electronic Magneto Telephone with accessories	10	Nos.	3,600.00	36000.00
46	PVC insulated multi- strand single core copper conductor cable 10 sq.mm.as per IRS S-76/89 (Amd.-3) or latest.	500	Mtrs.	120.00	60000.00
47	Auto Changeover LT	1	No.	55,000.00	55000.00
48	10 KVA DG set	1	Set	332,000.00	332000.00
49	Relocation of Emergency socket / Location box for Electrical works	1	LS	500,000.00	500000.00
				SUB TOTAL	103671450.00
50	Transportation, installation etc 40% on sub total of supply item	1	40%	41,468,580.00	41468580.00
51	Cable trenching, laying & refilling	15	Km.	74,000.00	1110000.00
				TOTAL	146,250,030.00
				<b>Or say Rs. In Lakh</b>	<b>1,462.50</b>

N.B *The cost of Electrical & Civil portion associated with S&T works has been included in the Electrical and Engineering Estimates respectively.*

**DETAILED PROJECT REPORT  
SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**

**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED  
TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**

**COST OF ALTERATION WORK IN TLHR CABIN IN RELATED TO PROPOSED NEW TFL LOADING YARD**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
1	Alteration at Talcher TLHR Cabin including Indoor & outdoor work.	1	LS	10000000.00	10000000.00
2	Relocation of Emergency socket / Location box for Electrical works	1	LS	500,000.00	500000.00
				SUB TOTAL	10500000.00
3	Transportation, installation etc 40% on sub total of supply item	1	40%	4,200,000.00	4200000.00
4	Cable trenching, laying & refilling	2	Km.	74,000.00	148000.00
				TOTAL	14,848,000.00
				<b>Or say Rs. In Lakh</b>	<b>148.48</b>

**N.B** *The cost of Electrical & Civil portion associated with S&T works has been included in the Electrical and Engineering Estimates respectively.*

**DETAILED PROJECT REPORT  
SIGNAL ENGINEERING & TELECOMMUNICATION ESTIMATE**

**FOR CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL- AMONIA- UREA FOR PROPOSED  
TALCHER FERTILIZERS LIMITED,ODISHA OF KHURDA ROAD DIVISION OF EAST COAST RAILWAY.**

**COST OF ALTERATION WORK IN TLSB CABIN IN RELATED TO PROPOSED NEW TFL LOADING YARD**

Sl. No.	Description	Qty	Unit	Rate (Rs.)	Amount ( Rs.)
1	Alteration at Talcher TLSB Cabin including Indoor & outdoor work.	1	LS	10000000.00	10000000.00
2	Relocation of Emergency socket / Location box for Electrical works	1	LS	500,000.00	500000.00
				SUB TOTAL	10500000.00
3	Transportation,installation etc 40% on sub total of supply item	1	40%	4,200,000.00	4200000.00
4	Cable trenching, laying & refilling	2	Km.	74,000.00	148000.00
				TOTAL	14,848,000.00
				<b>Or say Rs. In Lakh</b>	<b>148.48</b>

**N.B** *The cost of Electrical& Civil portion associated with S&T works has been included in the Electrical and Engineering Estimates respectively.*



**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**SUMMARY OF ALL ELECTRICAL ENGINEERING WORKS**

(Cost in Lakhs of Rupees)

Sl.No.	Item	[Tr-D]	[G]	Reference
1	OHE Works	1907.12		E-1
2a	Extension of SSP at TFL	155.06		E-2
2b	Electrification of Extended SSP		1.29	E-2 A
3	SCADA work for Extended Switching Posts	25.67		E-3
4	Provision of 10 KVA AT for panel cabin	10.94		E-4
5	Electrification of Panel Cabin		29.84	E-5
6	Electrification of Crew Rest Room at Inplant		9.49	E-6
7	Electrification of FOIS & TMS at Inplant		5.63	E-7
8	Illumination of Railway/ In-Plant Yard		581.35	E-8
9	Illumination of pathway for GDR check		16.57	E-9
10	LT Power supply arrangement for Inplant incld. Lightening Protection		52.07	E-10
11	DG Supply through Cable		8.78	E-11
12	Modification of 11 & 33 KV Overhead line		109.80	E-12 & E-12/1
13 (a)	Modification of 132 KV Lines		264.93	E-13
13 (b)	ILLUMINATION OF COVERED SHED AREA		94.67	E-14
13 (C)	Civil works for Provision of Switching post control cubicle , OHE Depot & Dismantling of Switching post	22.40		
<b>14</b>	<b>Total</b>	<b>2121.19</b>	<b>1174.42</b>	
15	Infrastructural facilities on 13			
(a)	Initial spares @3%	63.64		
(b)	Testing & Measuring equipments @2%	42.42		
(c)	BD Transport (LS) @ 3%	63.64		
(d)	Furniture & office equipments @1%	21.21		
<b>16</b>	<b>Total (14+15)</b>	<b>2312.09</b>	<b>1174.42</b>	
17	Tranportation of materials from store to site & return of excess / Dismantled materials back to store @ 4% on 14	84.85	46.98	
18	Misc. Works			
(a)	Publication of NIT & Warning Notices (LS)	25.00	10.00	
(b)	Hiring charge of vehicle for transportation of Railway officials till commissioning	25.00	5.00	
(c)	Hiring charges of Tower Wagon including crew from Railway	34.37		
(d)	Traffic/Power Block charge (Tentative)	80.00		
<b>19</b>	<b>Total Cost of Work (16+17+18)</b>	<b>2561.31</b>	<b>1236.40</b>	
20	Labour Welfare cess @ 1% on 19	25.61	12.36	
<b>21</b>	<b>Total Cost of Work (19+20)</b>	<b>2586.92</b>	<b>1248.76</b>	
<b>22</b>	<b>GST @ 18 % on 19</b>	<b>461.04</b>	<b>222.55</b>	
<b>23</b>	<b>TOTAL (21+23)</b>	<b>3047.95</b>	<b>1471.31</b>	
<b>24</b>	<b>Departmental Charges on 19</b>			
(a)	On Tr-D works @ 6.25%	160.08		
(b)	General Services @ 4.0%		49.46	
<b>25</b>	<b>Total (24+23)</b>	<b>3208.04</b>	<b>1520.77</b>	
26	Environmental Cess @ 1% on 21	25.87	12.49	
<b>27</b>	<b>Overall Total (25+26)</b>	<b>3233.91</b>	<b>1533.25</b>	
<b>28</b>	<b>Total TRD+General</b>		<b>4767.16</b>	
<b>29</b>	<b>Civil Work</b>			
i	OHE Depot (SqM)	10		E-1
ii	Provision of Switching post control cubicle (SqM)	33		E-2
iii	Dismantling of Switching post cubicle (SqM)	22		E-2
iv	Switching Room (SqM)		9	E-10
<b>30</b>	<b>S&amp;T work</b>			

<b>Sl.No.</b>	<b>Item</b>	<b>[Tr-D]</b>	<b>[G]</b>	<b>Reference</b>
(i)	Provison of control/ communication cable/ equipments/ emergency sockets etc.	LS		E-3

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FURTLIZERS LIMITED,ORISSA**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**OHE WORKS**

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
1	Foot by foot survey & preparation of OHE pegging plan including modification/regrading & Dismantling work	TKM	21	6,553.00	137,613.00
2	Preparation of Design & Drawing of Overhead equipment including modification/ regrading & Dismantling works	TKM	21	6,553.00	137,613.00
3	Concrete for foundation & plinth				
	(i) Ordinary soil/Hard soil including rock required chieseling (Grade M-15)	Cum	3100	8,619.00	26,718,900.00
	(ii) Reinforced Concrete	Cum	44	9,214.00	405,416.00
	(iii) Rocky soil	Cum	150	10,684.00	1,602,600.00
4	Supply and Manual erection of traction mast/other special masts (BFB/RSJ/B-Series) including terminating structures & gantry masts/along track feeder				
	(i) Supply	MT	220	108,468.00	23,862,960.00
	(ii) Erection	MT	220	4,019.00	884,180.00
5	Supply & Erection of TTC/Portal assembly complete				
	(i) Supply	MT	50	114,176.00	5,708,800.00
	(ii) Erection	MT	50	6,700.00	335,000.00
6	Supply of				
	(i) Hard drawn grooved copper contact wire (107 Sq.mm)	Km.	30.00	1,119,868.00	33,596,040.00
	(ii) Cadmium copper catenary wire (65 Sq.mm)	Km.	32.00	746,581.00	23,890,592.00
	(iii) Large span wire	Km.	1.0	100,893.00	100,893.00
	(iii) Bridle wire	m	500.0	324.00	162,000.00
7	Supply & Erection of fabricated steel works other than mast including Dwarf mast for anchor				
	(i) Supply	MT	65	114,175.00	7,421,375.00
	(ii) Erection	MT	65	6,700.00	435,500.00
8	Supply & Erection Guy rod assembly				
	(i) Supply	No.	100	8,719.00	871,900.00
	(ii) Erection	No.	100	1,462.00	146,200.00
9a	Supply & Erection of single Bracket Assembly without insulators conventional				
	(i) Supply	No.	600	7,718.00	4,630,800.00
	(ii) Erection	No.	600	1,462.00	877,200.00
9b	Supply & Erection of single Bracket Assembly without insulators tramway type regulated				
	(i) Supply	No.	40	19,136.00	765,440.00
	(ii) Erection	No.	40	1,450.00	58,000.00
10(a)	Supply & Erection of Overhead Equipment conventional				
	(i) Supply	Km.	21.00	37,329.00	783,909.00
	(ii) Erection	Km.	21.00	22,398.00	470,358.00
10(b)	Supply & Erection of tramway type OHE regulated type				

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	(i) Supply	Km.	2.00	80,000.00	160,000.00
	(ii) Erection	Km.	2.00	20,800.00	41,600.00
11(a)	Supply & Erection of regulating equipment ( 3 pulley modified type) with normal counter weight assembly for conventional OHE				
	(i) Supply	No.	11	64,621.00	710,831.00
	(ii) Erection	No.	11	3,419.00	37,609.00
11(b)	Supply & Erection of regulated equipment (Tramway)				
	(i) Supply	No.	4	60,000.00	240,000.00
	(ii) Erection	No.	4	5,000.00	20,000.00
12	Supply & Erection of materials for termination of double overhead equipment conductor (Excluding 9 tonne insulator)				
	(i) Supply	No.	60	6,683.00	400,980.00
	(ii) Erection	No.	60	661.00	39,660.00
13	Supply & Erection of materials for termination of single overhead equipment conductor(excluding 9 ton insulator)				
	(i) Supply	No.	30	5,598.00	167,940.00
	(ii) Erection	No.	30	1,245.00	37,350.00
14(a)	Supply & Erection of anti-creep for conventional OHE (excluding 9 tonne insulator and catenary wire with SPS) conventional				
	(i) Supply	No.	25	9,387.00	234,675.00
	(ii) Erection	No.	25	1,283.00	32,075.00
14(b)	Supply & Erection of anti-creep for tramway type OHE				
	(i) Supply	No.	2	9,000.00	18,000.00
	(ii) Erection	No.	2	1,178.00	2,356.00
15	Supply & erection of 9 tonne Insulator for polluted zone 1050 mm CD				
	(i) Supply	Each	120	4,453.00	534,360.00
	(ii) Erection	Each	120	445.00	53,400.00
16 (a)	Supply of large (105 sqmm) Copper jumper (G jumper)	Mtr	300	1,265.00	379,500.00
16 (b)	Supply & erection of copper jumper (160 Sqmm)				
	(i) Supply	Mtr	1000	1,438.00	1,438,000.00
	(ii) Erection	Mtr	1000	143.00	143,000.00
17	Supply of small (50 sqmm) Copper jumper (C/F/AT Jumper)	Mtr	500	530.00	265,000.00
18	Erection of copper jumper (105 sqmm)	Mtr	300	127.00	38,100.00
19 a)	Erection of copper jumper (50 sqmm)	Mtr	500	196.00	98,000.00
b)	Erection of large span wire	Mtr	500	97.00	48,500.00
20	Supply & Erection of Structure bond (Wire bond type, M.S Flat)				
	(i) Supply	Each	600	494.00	296,400.00
	(ii) Erection	Each	600	194.00	116,400.00
21	Supply & Erection of Transverse and Special Bond (Wire bond type, M.S Flat)				
	(i) Supply	Each	50	647.00	32,350.00
	(ii) Erection	Each	50	197.00	9,850.00
22	Supply & Erection of longitudinal bond (Wire bond type, M.S Flat)				
	(i) Supply	Each	3500	347.00	1,214,500.00
	(ii) Erection	Each	3500	147.00	514,500.00
23	Supply & Erection of single earth electrode with earth pit box cover complete				

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	(i) Supply	Each	100	2,807.00	280,700.00
	(ii) Erection	Each	100	1,791.00	179,100.00
24(a)	Supply & Erection of section insulator assembly including core insulator (excluding cut in insulator) conventional				
	(i) Supply	Each	28	47,189.00	1,321,292.00
	(ii) Erection	Each	28	5,244.00	146,832.00
24(b)	Supply & Erection of section insulator assembly including core insulator (excluding cut in insulator) tramway regulated type				
	(i) Supply	Each	4	55,300.00	221,200.00
	(ii) Erection	Each	4	4,500.00	18,000.00
25	Supply & Erection of pull off arrangement for one OHE (excluding 9 tonne insulator)				
	(i) Supply	No.	40	9,176.00	367,040.00
	(ii) Erection	No.	40	338.00	13,520.00
26 a)	Supply & erection of various types of caution boards to RDSO specification	No.	50	1,573.00	78,650.00
b)	Supply & erection of retro reflect caution boards				
	1. Special caution Boards (unloading/loading zone)				
	i) Supply	No	12	7953.00	95,436.00
	ii) Erection	No	12	25.00	300.00
c)	Supply & erection of electric engine stop board				
	(i) Supply	No	10	1,245.00	12,450.00
	(ii) Erection	No	10	138.00	1,380.00
d)	Supply & Erection of Caution - unwired line				
	i) Supply	No	10	1,245.00	12,450.00
	ii) Erection	No	10	138.00	1,380.00
27 a)	Supply & erection of number plates (enamelled)				0.00
	(i) Supply	No.	4	731.00	2,924.00
	(ii) Erection	No.	4	73.00	292.00
27 b)	Supply & erection of number plates (retro reflect)				
	(i) Supply	No.	550	811.00	446,050.00
	(ii) Erection	No.	550	74.00	40,700.00
28	Supply & Erection of sectioning Diagram Board (Size 4'x2')	No.	6	4,611.00	27,666.00
29	(a) Supply of 1050 mm CD Insulator				
	(i) Stay	No.	640	3,389.00	2,168,960.00
	(ii) Bracket	No	640	3,389.00	2,168,960.00
	(b) Supply of 1600 mm CD Insulator				
	(i) 9 t Insulator	No	2	3,476.00	6,952.00
	(ii) Stay Insulator	No	5	3,389.00	16,945.00
	(iii ) Bracket Insulator	No	5	3,389.00	16,945.00
	(c ) Erection of 1600 mm CD Insulator 9 t	No.	2	277.00	554.00
30(a)	Supply & erection of 25 KV Single Pole Isolator 1600 Amp complete with insulator etc				
	(i) Supply	No	14	54,397.00	761,558.00
	(ii) Erection	No	14	2,121.00	29,694.00
30(b)	Supply & erection of 25 KV Double Pole Isolator 1600 Amp complete with				
	(i) Supply	No	4	101,099.00	404,396.00

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	(ii) Erection	No	4	3,931.00	15,724.00
30(c)	Supply & erection of Inter locking arrangements				
	(i) Supply	No	6	9,626.00	57,756.00
	(ii) Erection	No	6	1,129.00	6,774.00
30(d)	Supply & erection of Earthing Heel				
	(i) Supply	No	6	10,725.00	64,350.00
	(ii) Erection	No	6	1,075.00	6,450.00
30(e)	Supply & erection of Danger Board				
	(i) Supply	No	50	563.00	28,150.00
	(ii) Erection	No	50	56.00	2,800.00
31	Supply & erection of additional fittings at turnouts/overlaps				
	(i) Supply	No.	40	3,457.00	138,280.00
	(ii) Erection	No.	40	425.00	17,000.00
32	Supply & Erection of Key Box for isolator etc.	No	1	8,473.00	8,473.00
33	Supply & erection of 25 KV Post Insulator without clamps etc.				
	(i) Supply	No.	40	7,134.00	285,360.00
	(ii) Erection	No.	40	655.00	26,200.00
34	Supply & Erection of earth bus of MS flat size 50mm x 6mm				
	(i) Supply	Mtr	680	329.00	1,145,120.00
	(ii) Erection	Mtr	680	42.00	48,960.00
35	Supply & erection of 25 KV feeder wire 37/2.25 mm, 150 sqmm copper				
	(i) Supply	Mtr	500	1,684.00	2,500,000.00
	(ii) Erection	Mtr	500	72.00	202,500.00
36	Extra for supply & erection of termination arrangement of Feeder (excluding 9 tonne insulator)				
	(i) Supply	No	8	5,000.00	40,000.00
	(ii) Erection	No	8	405.00	3,240.00
37	Extra Erection charge under Power block				
a)	Traction masts	MT	10	9,097.00	90,970.00
b)	SPS	MT	5	11,646.00	58,230.00
c)	Cantilever conventional	No.	35	1,516.00	53,060.00
d)	OHE conventional	Km.	2	50,551.00	101,102.00
e)	Section insulator conventional	No.	6	7,077.00	42,462.00
f)	Cut in insulator 9 t.	No.	8	2,023.00	16,184.00
g)	Termination of OHE Double	No	8	3,033.00	24,264.00
h)	Large jumper wire (105)	Mtr	100	445.00	44,500.00
i)	Small jumper wire	Mtr	100	445.00	44,500.00
j)	Large span wire	Mtr	300	99.00	29,700.00
k)	Additional fittings at turnouts / overlaps	No	6	1,779.00	10,674.00
l)	TTC/Portal	Mt.	6	9,097.00	54,582.00
m)	Regulating equipment	No.	6	6,067.00	36,402.00
38	Adjustment of OHE after Tower Wagon checking	Span	650	438.00	284,700.00
39	Splicing & extension of an overhead equipment under power block	No.	8	5,057.00	40,456.00
40	Slewing of OHE	Span	10	1,599.00	15,990.00
41	Transfer of OHE from one mast to another under power block	No.	12	5,057.00	60,684.00
42	Dismantling charges				
a)	Under Power Block				
i)	Cantilever	No	10	1,821.00	18,210.00

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
ii)	SPS	t.	0.5	8,087.00	4,043.50
b)	Under Non Power Block				
i)	Cutting of Mast	No	10	2,023.00	20,230.00
ii)	Regulating Equipment	No	25	35,390.00	884,750.00
iii)	Guyrod	No	4	1,011.00	4,044.00
iv)	FT	No	10	177,977.00	1,779,770.00
43	Extra for Anti theft charging	LS	LS	98,789.00	98,789.00
44	Station Working Rule Diagram	No.	6	8,087.00	48,522.00
45	Anti corrosive painting on cantilever & mast	No	500	1,694.00	847,000.00
46	Manning of Section				
a)	Without Gun	Man month	720	18,961.00	13,651,920.00
b)	With Gun	Man month	180	21,233.00	3,821,940.00
c)	Hiring Charges for Vehicle for inspection by RITES/Railway Officials	Month	24	52,898.00	1,269,552.00
47a	Site clearance including tree cutting, tree trimming	LS	LS	200,000.00	200,000.00
47b	Compliance of observations made by Railway Officials, collection of field data ( test result) & submission to various units for approval & processing of EIG/CRS sanction	LS		499,000.00	499,000.00
48	Extra for stage working	LS	LS	1,000,000.00	1,000,000.00
49	Prorata cost on testing of insulator	No.	427	493.00	210,511.00
50	Misc unforeseen & modification works	LS	LS	500,000.00	500,000.00
51	Level crossing Ht gauge				
	(i) Supply	No	10	597,775.00	5,977,750.00
	(ii) Erection	No	10	110,000.00	1,100,000.00
52	Special tools, Jigs, Fixtures, clamps etc including Furniture	LS		1,000,000.00	1,000,000.00
52(a)	Oliver G-X	No	1	2,000,000.00	2,000,000.00
<b>53</b>	<b>Total Rs. (Traction)</b>				<b>190,712,179.50</b>
54a	Hiring charges of Tower Wagon including crew from Railway	Day	20	171,839.00	3,436,780.00
54b	Traffic/Power Block charge (Tentative)	LS	LS	4,800,000.00	4,800,000.00
<b>56</b>	<b>Civil Works (Cost covered under civil estimate)</b>				<b>8236780.00</b>
a)	OHE Depot	Sqm	10	30000	300000.00

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FERTILIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**PROVISION of SSP AT TFL SIDING**

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
1(a)	Preparation of Design & Drawing of Switching Station	Set	1	21,847.00	21,847.00
1(b)	Foot by Foot survey & preparation of Design/Drawings for feeder	Km	0.65	6,553.00	4,259.45
2	Concrete for foundation, Plinth & trenches				
	(i) Ordinary soil/Hard soil including rock required chieseling (Grade M-15)	Cum	90	8,619.00	775,710.00
	(ii) Reinforced Concrete	Cum	2	9,214.00	18,428.00
	(iii) Rocky soil	Cum	18	10,684.00	192,312.00
3(a)	Supply and erection of main mast of Switching Station				
	(i) Supply	MT	3	108,468.00	325,404.00
	(ii) Erection	MT	3	4,019.00	12,057.00
3(b)	Supply and erection of Rolled/ Fabricated/special masts				
	(i) Supply	MT	8	108,468.00	867,744.00
	(ii) Erection	MT	8	4,019.00	32,152.00
4	Supply & Erection of Galvanised fabricted Steel works other than Main Mast				
	(i) Supply	MT	5	114,175.00	570,875.00
	(ii) Erection	MT	5	6,700.00	33,500.00
5a)	Supply, Erection, testing & commisioning of vaccum circuit breaker 25 KV				
	(i) Supply	No	2	618,174.00	1,236,348.00
	(ii) Erection, testing & Commissioning	No	2	61,818.00	123,636.00
5b)	Supply, Erection, testing of 25 KV SF6/ Vaccum type interruptor				
	(i) Supply	No	3	489,633.00	1,468,899.00
	(ii) Erection, testing & Commissioning	No	3	10,920.00	32,760.00
6(a)	Supply & erection of 25 KV Double Pole isolator complete in all respect				
	(i) Supply	No	5	101,099.00	505,495.00
	(ii) Erection	No	5	3,931.00	19,655.00
6(b)	Supply & erection of 25 KV Single Pole isolator complete in all respect				
	(i) Supply	No	2	54,397.00	108,794.00
	(ii) Erection	No	2	2,121.00	4,242.00
6(c)	Supply & erection of Interlocking device				
	(i) Supply	No	5	11,306.00	56,530.00
	(ii) Erection	No	5	1,327.00	6,635.00
6(d)	Supply & erection of Key box	No	1	562.00	562.00
7 a)	Supply, Erection, testing and commissioning of 25 KV Potential Transformer Type-I				
	(i) Supply	No	1	65,118.00	65,118.00
	(ii) Erection	No	1	1,654.00	1,654.00
7 b)	Supply & Erection, testing & commissioning of 25 KV PT (type-II)				
	(i) Supply	No	1	65,118.00	65,118.00
	(ii) Erection	No	1	1,654.00	1,654.00
7 c)	Supply, Erection and commissioning of current transformer 1000-500/5A				
	(i) Supply	No	1	81,194.00	81,194.00
	(ii) Erection	No	1	2,026.00	2,026.00
8	Supply, Erection of 42 KV Lightning arrester (Gap less type) with surge monitor and insulating base				



Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	(i) Supply	No	5	35,884.00	179,420.00
	(ii) Erection	No	5	1,092.00	5,460.00
9(a)	Supply, Erection of 25 KV copper feeder wire 150 sqmm (along/across)				
	(i) Supply	Mtr	1000	1,684.00	1,684,000.00
	(ii) Erection	Mtr	1000	72.00	72,000.00
9(b)	Supply of feeder Jumper (160) copper				
	(i) Supply	Mtr	100	1,623.00	162,300.00
	(ii) Erection	Mtr	100	161.00	16,100.00
9(c)	Supply, Erection of feeder suspension arrangement without insulator				
	(i) Supply	No	14	2,165.00	30,310.00
	(ii) Erection	No	14	216.00	3,024.00
9 (d)	Supply & erection of large jumper wire				
	(i) Supply	Mtr	10	1,623.00	16,230.00
	(ii) Erection	Mtr	10	161.00	1,610.00
9 (e)	Supply & Erection of Catenary wire				
	(i) Supply	m	10	747.00	7,470.00
	(ii) Erection	m	10	75.00	750.00
10(a)	Supply & erection of Structure bond of MS flat size 40mm x 6mm				
	(i) Supply	No	20	351.00	7,020.00
	(ii) Erection	No	20	44.00	880.00
10(b)	Supply & erection of earth bus 50 x 6 mm				
	(i) Supply	Mtr	200	309.00	61,800.00
	(ii) Erection	Mtr	200	39.00	7,800.00
10(c)	Earthing strip 75 mm X 8 mm				
	(i) Supply	Mtr	50	468.00	23,400.00
	(ii) Erection	Mtr	50	195.00	9,750.00
10(d)	Supply & Erection of single earth electrode with earthpit box cover complete				
	(i) Supply	Each	4	2,925.00	11,700.00
	(ii) Erection	Each	4	1,867.00	7,468.00
11	Supply, Erection, Testing & Commissioning of Control & Relay Panel				
	(i) Supply	No	1	2,196,090.00	2,196,090.00
	(ii) Erection	No	1	56,024.00	56,024.00
12	Supply & erection of Guy rod assembly				
	(i) Supply	No	4	8,719.00	34,876.00
	(ii) Erection	No	4	1,462.00	5,848.00
13	Supply & erection of 9 ton insulator composite				
	(i) Supply	No	24	4,453.00	106,872.00
	(ii) Erection	No	24	445.00	10,680.00
14	Supply & erection of 25 KV Post insulator without clamps etc.				
	(i) Supply	No	16	7,134.00	114,144.00
	(ii) Erection	No	16	655.00	10,480.00
15	Supply & Erection of copper strips size (25mm x 3mm) for equipments earthing				
	(i) Supply	Mtr	30	585.00	17,550.00
	(ii) Erection	Mtr	30	81.00	2,430.00
16(a)	Supply & Erection and Commissioning of low maintenance lead acid Battery 110V, 40 AH				
	(i) Supply	Set	1	125,297.00	125,297.00

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	(ii) Erection	Set	1	7,505.00	7,505.00
16(b)	Supply & Erection and commissioning of battery charger for 110V, 40 AH low maintenance lead acid battery				
	(i) Supply	No	1	117,487.00	117,487.00
	(ii) Erection	No	1	4,738.00	4,738.00
16 (c)	Supply & Erection of LM lead acid battery 200 AH 110 V complete				
	(i) Supply	No	1	216,517.00	216,517.00
	(ii) Erection	No	1	27,064.00	27,064.00
16 (d)	Supply & erection of Battery charger for above				
	(i) Supply	No	1	332,728.00	332,728.00
	(ii) Erection	No	1	31,390.00	31,390.00
17	Supply & Erection of Terminal Board in Control Cubicle				
	(i) Supply	No	2	11,462.00	22,924.00
	(ii) Erection	No	2	476.00	952.00
18	Supply & Erection of 110V DC distribution Board.				
	(i) Supply	No	2	10,825.00	21,650.00
	(ii) Erection	No	2	951.00	1,902.00
19	Supply & Erection of 240V AC distribution Board.				
	(i) Supply	No	2	10,825.00	21,650.00
	(ii) Erection	No	2	951.00	1,902.00
20	Supply & Installation of Cables				
	(a) For Control and Indication ( 7 Core x 2.5 Sq.mm) Copper				
	(i) Supply	Mtr	500	201.00	100,500.00
	(ii) Erection	Mtr	500	42.00	21,000.00
	(b) For Catenary indication ( 2 Core x 2.5 Sq.mm) Copper				
	(i) Supply	Mtr	150	124.00	18,600.00
	(ii) Erection	Mtr	150	42.00	6,300.00
	(c) For Heater Supply ( 2 Core x 4 Sq.mm) Aluminium				
	(i) Supply	Mtr	200	114.00	22,800.00
	(ii) Erection	Mtr	200	42.00	8,400.00
	(d) For 110 V DC Supply ( 2 Core x 4 Sq.mm) Copper				
	(i) Supply	Mtr	150	135.00	20,250.00
	(ii) Erection	Mtr	150	44.00	6,600.00
	(e) Flexible PVC				
	(i) Supply	Mtr	30	55.00	1,650.00
	(ii) Erection	Mtr	30	9.00	270.00
21	Supply & Erection of Aluminium busbar 36/28mm				
	(i) Supply	Mtr	50	593.00	29,650.00
	(ii) Erection	Mtr	50	141.00	7,050.00
22	Supply & Erection of Aluminium Bus Connectors				
	a) Bus Terminal (6480)				
	(i) Supply	No	16	1,935.00	30,960.00
	(ii) Erection	No	16	118.00	1,888.00
	b) Bus Splice(6490)				
	(i) Supply	No	4	1,997.00	7,988.00
	(ii) Erection	No	4	118.00	472.00
	c) Bus Tee Connector(6500)				
	(i) Supply	No	6	2,028.00	12,168.00
	(ii) Erection	No	6	110.00	660.00

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	d) 36/20mm terminal connector (6530)				
	(i) Supply	No	4	1,935.00	7,740.00
	(ii) Erection	No	4	110.00	440.00
	e) Tap Connector(6520)				
	(i) Supply	No	1	2,027.00	2,027.00
	(ii) Erection	No	1	110.00	110.00
	f) Flexible Bus Splice (6550)				
	(i) Supply	No	4	3,247.00	12,988.00
	(ii) Erection	No	4	132.00	528.00
	g) Terminal Connector Bolted type(6830-1)				
	(i) Supply	No	6	1,715.00	10,290.00
	(ii) Erection	No	6	110.00	660.00
23	Supply & Erection of materials for termination of 25 KV feeder wire				
	(i) Supply	No	6	4,100.00	24,600.00
	(ii) Erection	No	6	405.00	2,430.00
24(a)	Supply and erection of fencing panel				
	(i) Supply	Mtr	24	2,044.00	49,056.00
	(ii) Erection	Mtr	24	141.00	3,384.00
24(b)	Supply and erection of fencing upright				
	(i) Supply	MT	0.50	82,689.00	41,344.50
	(ii) Erection	MT	0.50	3,923.00	1,961.50
25	Supply and erection of Anti-Climbing device				
	(i) Supply	Mtr	340	427.00	145,180.00
	(ii) Erection	Mtr	340	79.00	26,860.00
26(a)	Painting of fencing assembly	Sqm	550	246.00	135,300.00
26(b)	Provision of anti corrosive paint on masts	No	20	1,694.00	33,880.00
27 i)	Supply of various type of Enamelled Board				
a)	Name Board	No.	2	1,502.00	3,004.00
b)	Number plate	No.	10	1,573.00	15,730.00
c)	Caution Board	No.	20	1,573.00	31,460.00
27 ii)	Erection of enamelled board				
a)	Name Board	No.	15	798.00	11,970.00
b)	Number plate	No.	30	798.00	23,940.00
c)	Caution Board	No.	10	798.00	7,980.00
28	Supply & Erection of Schematic power supply diagram board ( size 4' x 2')	No	6	5,244.00	31,464.00
29 a)	Brick Soling	Sqm	60	109.00	6,540.00
29 b)	Surface raming	Sqm	60	109.00	6,540.00
29 c)	Gravel carpetting ( 100 mm thick)	Sqm	50	96.00	4,800.00
30	Supply & erection of Cable clamps	LS	LS	2,000.00	2,000.00
31	Supply & erection of connector ( Assorted type)				
	(i) Supply	LS	LS	5,000.00	5,000.00
	(ii) Erection	LS	LS	500.00	500.00
32	Testing & System commissioning	LS	LS	100,000.00	100,000.00
33	Supply & erection of A.T. 25 KV/10 KVA with D.O. Fuse switch assembly support insulators (without mast)				
	(i) Supply	No.	1	156,328.00	156,328.00
	(ii) Erection	No.	1	8,881.00	8,881.00
34	Supply & erection of 2 x 70 sqmm cable Aluminium	No.			
	(i) Supply	Mtr	20	400.00	8,000.00

Item No	Description of the Item	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	(ii) Laying of cable on RCC / Hume pipe	Mtr	10	42.00	420.00
	(iii) Laying of cable on the wall	m	10	91.00	910.00
35a)	Supply & laying of 50 mm dia GI pipe	Mtr	5	600.00	3,000.00
35b)	Supply, laying & fixing of RCC/Hume pipe 150	Mtr	10	134.00	1,340.00
36	Supply & erection of Shock Treatment chart (Laminated)	No.	1	1,932.00	1,932.00
37	Supply & Fitment of Fire Extinguisher CO <sub>2</sub> type capacity 9 ltr. (wall mounted)	No.	2	3,247.00	6,494.00
38	Fire buckets painted 9 ltr cap. Filled with dry sand (4 in a set)	No	4	2,165.00	8,660.00
39a	Shed with stand for fire buckets including painting	LS	LS	6,000.00	6,000.00
39b	Cable Trench with RCC trench Cover	Cum	5	6,662.00	33,310.00
39c	Supply & Erection of Drain Pipe	Mtr	45	2,015.00	90,675.00
40	First Aid Box	Set	1	1,001.00	1,001.00
41	3 Persons Without gun (60x18961) for 1 position Day & Night	Man Month	3	56,883.00	170,649.00
42	Provision of Buried rail				
a)	Supply of 52/60 Kg BG Rail for buried Rail	Tonne	3.2	192,293.00	615,337.60
b)	Welding of Rail	No	2	4,474.00	8,948.00
c)	Placement under track	loc.	4	3,356.00	13,424.00
d)	Earth lead 5 places	No	20	1,119.00	22,380.00
e)	SS & copper rivets / fastners				
	(i) Supply	LS	LS	6,000.00	6,000.00
	(ii) Erection	LS	LS	600.00	600.00
f)	Ballast removal for 30 m @ 2.3 cum per Rm	Cum	70	209.00	14,630.00
g)	Ballast spreading for 30 m	Cum	70	308.00	21,560.00
43a	Works under Power Block				
	ii) Feeder wire	m	100	127.00	12,700.00
	iii) 9t. Insulator	No	6	298.00	1,788.00
	iv) Feeder Jumper	m	20	449.00	8,980.00
	v) Feeder Termination	No	6	357.00	2,142.00
	vi) Post insulator	No	2	601.00	1,202.00
43b	Dismantling work under switching post	LS	LS	150,000.00	150,000.00
44a	Misc. & unforeseen work	LS		200,000.00	200,000.00
44b	Compliance of observations made by Railway Officials, collection of field data ( test result) & submission to various units for approval & processing of EIG/CRS sanction	LS		200,000.00	200,000.00
45	Furniture for Switching Post Monitoring	LS	1	150,000.00	150,000.00
46	Site clearance	LS		100,000.00	100,000.00
47	<b>Total Traction</b>				<b>15,506,005.05</b>
48	Traffic & Power block charge	LS	LS	3,200,000.00	3,200,000.00
49a	<b>ELECTRIFICATION OF SWITCHING POST CUBICLE (E-2A)</b>			103,610.00	103,610.00
49b	<b>DISMANTLING WORKS</b>	LS	LS	25,000.00	25,000.00
50	<b>Total (G)</b>				<b>128,610.00</b>
51	<b>Total (Traction + General)</b>				<b>15,634,615.05</b>
52	<b>Civil Works (Cost covered under civil estimate)</b>				
a)	Provision of Switching post control cubicle	Sqm	50	30000	1500000
b)	Dismantling of Switching post cubicle	Sqm	22	20000	440000

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ORISSA**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**ELECTRIFICATION OF SWITCHING POST**

SI.No	Description of Item	Unit	Qty	Rate	Amount.
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc. as required for service building, office, panel cabin etc.	Point	12	916.00	10,992.00
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper single core cable in surface/ recessed medium class PVC conduit as required				
a)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	100	204.00	20,400.00
3	Supplying and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 & 15/16 amps socket outlet and 15/16 amps piano type switch, connection, painting etc. as required.	Each	6	348.00	2,088.00
4	Installation, testing and commissioning of pre-wired, LED fitting of all types, with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	8	121.00	968.00
5	Supplying & fixing of batten holer & batten type fixing, indoor single integrated LED lamp of 9W.	Each	2	245.00	490.00
6	Supplying of box type, indoor single integrated sleek extruded polycarbonate LED tube light fittings with 1 X18 W lamp, integrated driver, holders, acrylic made protective cover and other accessories .	Set	6	1475.00	8,850.00
7	Supply, fixing, testing and commissioning of integral type LED Street light Fittings of IP 66 rating (bracket light) complete with 1 X 25 watt LED lamp, driver etc.	Set	2	4998.00	9,996.00
8	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	2	4751.00	9,502.00
9	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	20	33.00	660.00
10	Supplying and fixing Double door prewired SP&N MCB distribution board of steel sheet for 240 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)				
(a)	2 + 4 way	Each	1	3035.00	3,035.00

SI.No	Description of Item	Unit	Qty	Rate	Amount.
11	Supplying and fixing 5 amps to 32 amps rating, 240 volts, "C" curve, miniature circuit breaker suitable for inductive load of Single poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Set	4	205.00	820.00
12	Supplying and fixing following rating, DP, 240 volts, MCB, having 10kA short circuit current rating with 'C' curve in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
(a)	25 Amps	Set	1	480.00	480.00
13	Supply of 1.1 kV grade, XLPE insulated, armoured, PVC outer sheath aluminium cable of following sizes.				
a)	4 C X 16 sqmm	Metre	30	426.00	12,780.00
14	Laying of one number XLPE power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	20	106.00	2,120.00
15	Laying of one number XLPE power cable of 1.1 KV grade of following size in the existing pipe as required.				
i)	Upto 35 sq mm	Metre	20	20.00	400.00
16	Providing, laying following dia pipe in ground as required				
a)	40 mm dia	Metre	20	136.00	2,720.00
17	Laying of following size cable in the existing masonry duct as required				
i)	Upto 35 sq mm	Metre	5	14.00	70.00
18	Laying and fixing of one number XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	5	29.00	145.00
19	Supplying and making indoor end termination with brass compression gland and aluminium lugs for following size of XLPE aluminium conductor cable of 1.1 KV grade as required.				
i)	4 X 16 sq. mm	Each	2	297.00	594.00
20	Misc Work	LS	1	16500.00	16,500.00
<b>21</b>	<b>TOTAL</b>				<b>103,610.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FERTILIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**SCADA WORK FOR SSP**

Item No.	Description of work	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1(a)	Design, Engineering & supply of RTU (FP)	No.	1.00	1,529,637.00	1,529,637.00
1(b)	Erection, testing & commissioning of RTU (FP)	No.	1.00	104,427.00	104,427.00
2	Modification to SCADA equipment Hardware & Software at RCC, KHURDA	Lot	1.00	95,271.00	95,271.00
3	Dismantling of Existing RTU	No	1.00	71,522.00	71,522.00
4	Supply & erection of Lead acid battery 200 AH 110 V completed with stand & accessories				
	i) Supply	No	1.00	190,375.00	190,375.00
	ii) Erection	No	1.00	23,797.00	23,797.00
5	Supply & erection of Battery Charger for 200 AH 110 V				
	i) Supply	No	1.00	292,556.00	292,556.00
	ii) Erection	No	1.00	27,600.00	27,600.00
6	Modification of Sectioning Diagram at RCC, KHURDA	No	1.00	5,598.00	5,598.00
7	Manning of Post	Man Month	3.00	8,810.00	26,430.00
8	Misc Work	LS		200,000.00	200,000.00
9	<b>Total (Electrical) Rs.</b>				<b>2,567,213.00</b>
10	<b>Total for 1 nos</b>				<b>2,567,213.00</b>
11	<b>S &amp; T work</b> ( to be covered under S & T estimate)				
	Provision of control / communication cable/ equipments including emergency sockets etc.	LS			

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**PROVISION OF 10 KVA AT FOR PANEL CABIN**

SI No	Description	Unit	Qty	Unit rate (Rs.)	Amount (Rs.)
1	Preparation of design and drawing for AT	LS	LS	5,500.00	5,500.00
2	Concrete for foundation	Cum	4	7,578.00	30,312.00
3	Supply & erection of				
(a)	Fabricated mast				
	(i) Supply	Ton	0.4	95,371.00	38,148.40
	(ii) Erection	Ton	0.4	3,535.00	1,414.00
(b)	Fabricated steel works other than masts				
	(i) Supply	Ton	0.1	108,468.00	10,846.80
	(ii) Erection	Ton	0.1	4,019.00	401.90
(c)	Catenary wire				
	(i) Supply	Mtr	10	657.00	6,570.00
	(ii) Erection	Mtr	10	68.00	680.00
(d)	Suspension arrangement for (c) including connector/lugs/ clamps				
	(i) Supply	LS	LS	2,500.00	2,500.00
	(ii) Erection	LS	LS	250.00	250.00
(e)	No. plate ( Enamel)				
	(i) Supply	No.	2	1,245.00	2,490.00
	(ii) Erection	No.	2	138.00	276.00
(f)	Supply & erection of Caution Board (Enamel)				
	(i) Supply	No.	1	731.00	731.00
	(ii) Erection	No.	1	73.00	73.00
(g)	Supply & erection of Large Jumper wire				
	(i) Supply	Mtr	10	1,438.00	14,380.00
	(ii) Erection	Mtr	10	143.00	1,430.00
4	Supply & erection of				
(a)	Earth Station				
	(i) Supply	No.	2	2,572.00	5,144.00
	(ii) Erection	No.	2	1,642.00	3,284.00
(b)	Earth Bus				
	(i) Supply	Mtr	20	309.00	6,180.00
	(ii) Erection	Mtr	20	39.00	780.00
(c)	63 A Fuse switch unit				
	(i) Supply	No.	1	4,803.00	4,803.00
	(ii) Erection	No.	1	481.00	481.00
(d)	Terminal Board in control cubicle				
	(i) Supply	No.	1	11,462.00	11,462.00
	(ii) Erection	No.	1	476.00	476.00
(e)	Structure Bond				
	(i) Supply	No.	1	435.00	435.00
	(ii) Erection	No.	1	170.00	170.00



SI No	Description	Unit	Qty	Unit rate (Rs.)	Amount (Rs.)
(f)	Cable laying				
(i)	along track	Mtr	225	270.00	60,750.00
(ii)	across track (without pipe)	Mtr	15	35.00	525.00
(iii)	on the wall	Mtr	10	95.00	950.00
(g)	4 way fuse box				
	(i) Supply	No.	1	8,752.00	8,752.00
	(ii) Erection	No.	1	847.00	847.00
5	Supply and erection of 25 KV/240 V 10 KVA Auxilary Transformer with DO fuse switch assembly complete				
	(i) Supply	No.	1	137,453.00	137,453.00
	(ii) Erection	No.	1	7,810.00	7,810.00
6	Supply of cable for 240 V A.C supply (2 core X 70 sqmm) Aluminium PVC	Mtr	250	353.00	88,250.00
7	Supply & Erection of copper strips size (25 mm X 3 mm) for equipment earthing				
	(i) Supply	Mtr	5	515.00	2,575.00
	(ii) Erection	Mtr	5	38.00	190.00
8	Supply & Erection of Anti climbing device				
	(i) Supply	Mtr	15	376.00	5,640.00
	(ii) Erection	Mtr	15	70.00	1,050.00
9	Supply and erection of 9 tonne insulator				
	(i) Supply	No.	1	3,477.00	3,477.00
	(ii) Erection	No.	1	277.00	277.00
10	Oil filtration Testing & Commissioning	LS	LS	5,000.00	5,000.00
11	Misc. Works including Painting etc	LS	LS	5,000.00	5,000.00
12 (a)	Supply & laying of HDPE Pipe 63mm	Mtr	240	267.00	64,080.00
12 (b)	Supply & erection of RCC spun pipe	Mtr	10	512.00	5,120.00
13	<b>Total ( 01 No.)</b>				<b>546,964.00</b>
14	<b>Total ( 02 No.)</b>				<b>1,093,928.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**ELECTRIFICATION OF PANEL CABIN**

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc. as required for service building, office, panel cabin etc.	Point	82	739.00	60,598.00
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper single core cable in surface/ recessed medium class PVC conduit as required				
a)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	150	166.00	24,900.00
3	Supplying and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 & 15/16 amps socket outlet and 15/16 amps piano type switch, connection, painting etc. as required.	Each	18	284.00	5,112.00
4	Installation, testing and commissioning of pre-wired, LED fitting of all types, with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	58	94.00	5,452.00
5	Supplying & fixing of batten holer & batten type fixing, indoor single integrated LED lamp of 9W.	Each	5	320.00	1,600.00
6	Supplying of box type, indoor single integrated sleek extruded polycarbonate LED tube light fittings with 1 X 18 W lamp, integrated driver, holders, acrylic made protective cover and other accessories .	Set	45	1322.00	59,490.00
7	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30cm) with 1.5 sqmm FR PVC insulated copper conductor, single core cable etc.	Each	12	98.00	1,176.00
8	Supply of 1400mm sweep ceiling fan suitable for operation on 230V, 50 Hz AC supply, complete with down rod, rubber shackle, blades, condensor, canopies etc. complete as required but without regulator.	Set	12	1752.00	21,024.00
9	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required. (Two module)	Each	12	292.00	3,504.00
10	Supply of single phase, 300mm sweep, 1400rpm exhaust fan suitable for operation on 230V, 50 Hz AC supply, complete with blades, condensor, frame etc. as required.	Set	4	2677.00	10,708.00
11	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc.	Each	4	209.00	836.00
12	Extra for fixing the louvers / shutters complete with frame for exhaust fan.	Each	4	92.00	368.00
13	Supply, erection, testing & commissioning of 1.5 ton split type 5 star rated room air conditioner with copper evaporator & cooling coil.	Set	6	51420.00	308,520.00
14	Supply, erection, testing & commissioning of 5 kVA single phase voltage stabiliser with working voltage 150 to 290 volt having low voltage cut off below 150 volt, high voltage cut off above 300 volt and time delay.	Each	6	6896.00	41,376.00
15	Supply, fixing, testing & commissioning of 4 module cover plate, 20A starter, 25 A socket, 25A plug for AC, water cooler.	Set	6	2285.00	13,710.00

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
16	Wiring of power plug for AC with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	60	166.00	9,960.00
17	Supply, fixing, testing and commissioning of integral type LED Street light Fittings of IP 66 rating (bracket light) complete with 1 X 25 watt LED lamp, driver etc.	Set	8	5008.00	40,064.00
18	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	2	4038.00	8,076.00
19	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	30	29.00	870.00
20	Supplying and fixing 4 way (4 + 12), Double door TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)	Each	2	7567.00	15,134.00
21	Supplying and fixing 5 amps to 32 amps rating, 240 volts, "C" curve, miniature circuit breaker suitable for inductive load of Single poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Set	24	174.00	4,176.00
22	Supplying and fixing 63A rating, four pole, (three phase and neutral), 415 volts, MCB, having 10kA short circuit current rating with 'C' curve in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	2	1701.00	3,402.00
23	Supply of 1.1 kV grade, XLPE insulated, armoured, PVC outer sheath aluminium cable of following sizes.				
a)	4 C X 16 sqmm	Metre	300	362.00	108,600.00
24	Laying of one number XLPE power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	250	90.00	22,500.00
25	Laying of one number XLPE power cable of 1.1 KV grade of following size in the existing pipe as required.				
i)	Upto 35 sq mm	Metre	250	17.00	4,250.00
26	Providing, laying following dia pipe in ground as required				
a)	40 mm dia	Metre	250	88.00	22,000.00
27	Laying of following size cable in the existing masonry duct as required				
i)	Upto 35 sq mm	Metre	25	12.00	300.00
28	Laying and fixing of one number XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	25	24.00	600.00
29	Supplying and making indoor end termination with brass compression gland and aluminium lugs for following size of XLPE aluminium conductor cable of 1.1 KV grade as required.				
i)	4 X 16 sq. mm	Each	2	253.00	506.00
30	Provision of Changeover Panel 63A (3 position)- RDSO specification	Set	1	83050.00	83,050.00
31	Misc and unforeseen works	LS			50,000.00
32	Provision of AC-2 Tonne, Split with installation	No	8	70000.00	560,000.00
33	<b>Total</b>				<b>1,491,862.00</b>
	2 Nos Panel Cabin Building				<b>2,983,724.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FERTILIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**ELECTRIFICATION OF CREW REST ROOM AT INPLANT**

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc. as required for service building, office, panel cabin etc.	Point	51	868.00	44,268.00
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper single core cable in surface/ recessed medium class PVC conduit as required				
a)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	150	166.00	24,900.00
3	Supplying and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 & 15/16 amps socket outlet and 15/16 amps piano type switch, connection, painting etc. as required.	Each	12	434.00	5,208.00
4	Installation, testing and commissioning of pre-wired, LED fitting of all types, with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	29	147.00	4,263.00
5	Supplying & fixing of batten holer & batten type fixing, indoor single integrated LED lamp of 9W.	Each	5	320.00	1,600.00
6	Supplying of box type, indoor single integrated sleek extruded polycarbonate LED tube light fittings with 1 X 18 W lamp, integrated driver, holders, acrylic made protective cover and other accessories .	Set	16	4904.00	78,464.00
7	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30cm) with 1.5 sqmm FR PVC insulated copper conductor, single core cable etc.	Each	9	150.00	1,350.00
8	Supply of 1400mm 5 star rayed sweep ceiling fan suitable for operation on 230V, 50 Hz AC supply, complete with down rod, rubber shackle, blades, condensor, canopies etc. complete as required but without regulator.	Set	9	2917.00	26,253.00
9	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required. (Two module)	Each	9	300.00	2,700.00
10	Supply of single phase, 300mm sweep, 1400rpm exhaust fan suitable for operation on 230V, 50 Hz AC supply, complete with blades, condensor, frame etc. as required.	Set	5	2677.00	13,385.00
11	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc.	Each	5	209.00	1,045.00
12	Extra for fixing the louvers / shutters complete with frame for exhaust fan.	Each	5	92.00	460.00
13	Supply, erection, testing & commissioning of 1.5 ton split type 5 star rated room air conditioner with copper evaporator & cooling coil.	Set	6	67320.00	403,920.00
14	Supply, erection, testing & commissioning of 5 kVA single phase voltage stabiliser with working voltage 150 to 290 volt having low voltage cut off below 150 volt, high voltage cut off above 300 volt and time delay.	Each	6	9163.00	54,978.00
15	Supply, fixing, testing & commissioning of 4 module cover plate, 20A starter, 25 A socket, 25A plug for AC, water cooler.	Set	6	2431.00	14,586.00

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
16	Wiring of power plug for AC with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	100	166.00	16,600.00
17	Supply, fixing, testing and commissioning of integral type LED Street light Fittings of IP 66 rating (bracket light) complete with 1 X 25 watt LED lamp, driver etc.	Set	8	5008.00	40,064.00
18	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	2	4038.00	8,076.00
19	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	30	29.00	870.00
20	Supplying and fixing 4 way (4 + 12), Double door TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)	Each	2	7567.00	15,134.00
21	Supplying and fixing 5 amps to 32 amps rating, 240 volts, "C" curve, miniature circuit breaker suitable for inductive load of Single poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Set	24	174.00	4,176.00
22	Supplying and fixing 63A rating, four pole, (three phase and neutral), 415 volts, MCB, having 10kA short circuit current rating with 'C' curve in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	2	1701.00	3,402.00
23	Supply of 1.1 kV grade, XLPE insulated, armoured, PVC outer sheath aluminium cable of following sizes.				
a)	4 C X 16 sqmm	Metre	300	362.00	108,600.00
24	Laying of one number XLPE power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	250	90.00	22,500.00
25	Laying of one number XLPE power cable of 1.1 KV grade of following size in the existing pipe as required.				
i)	Upto 35 sq mm	Metre	250	17.00	4,250.00
26	Providing, laying following dia pipe in ground as required				
a)	40 mm dia	Metre	250	88.00	22,000.00
27	Laying of following size cable in the existing masonry duct as required				
i)	Upto 35 sq mm	Metre	25	12.00	300.00
28	Laying and fixing of one number XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	25	24.00	600.00
29	Supplying and making indoor end termination with brass compression gland and aluminium lugs for following size of XLPE aluminium conductor cable of 1.1 KV grade as required.				
i)	4 X 16 sq. mm	Each	2	253.00	506.00
30	Misc and unforeseen works				25,000.00
31	<b>Total</b>				<b>949,458.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**ELECTRIFICATION OF FOIS & TMS AT INPLANT**

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc. as required for service building, office, panel cabin etc.	Point	22	739.00	16,258.00
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper single core cable in surface/ recessed medium class PVC conduit as required				
a)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	75	166.00	12,450.00
3	Supplying and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 & 15/16 amps socket outlet and 15/16 amps piano type switch, connection, painting etc. as required.	Each	4	284.00	1,136.00
4	Installation, testing and commissioning of pre-wired, LED fitting of all types, with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	15	94.00	1,410.00
5	Supplying & fixing of batten holer & batten type fixing, indoor single integrated LED lamp of 9W.	Each	1	320.00	320.00
6	Supplying of box type, indoor single integrated sleek extruded polycarbonate LED tube light fittings with 1 X 18 W lamp, integrated driver, holders, acrylic made protective cover and other accessories .	Set	10	1322.00	13,220.00
7	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30cm) with 1.5 sqmm FR PVC insulated copper conductor, single core cable etc.	Each	2	98.00	196.00
8	Supply of 1400mm sweep ceiling fan suitable for operation on 230V, 50 Hz AC supply, complete with down rod, rubber shackle, blades, condensor, canopies etc. complete as required but without regulator.	Set	2	1752.00	3,504.00
9	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required. (Two module)	Each	2	292.00	584.00
10	Supply of single phase, 300mm sweep, 1400rpm exhaust fan suitable for operation on 230V, 50 Hz AC supply, complete with blades, condensor, frame etc. as required.	Set	1	2677.00	2,677.00
11	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc.	Each	1	209.00	209.00
12	Extra for fixing the louvers / shutters complete with frame for exhaust fan.	Each	1	92.00	92.00
13	Supply, erection, testing & commissioning of 1.5 ton split type 5 star rated room air conditioner with copper evaporator & cooling coil.	Set	2	51420.00	102,840.00
14	Supply, erection, testing & commissioning of 5 kVA single phase voltage stabiliser with working voltage 150 to 290 volt having low voltage cut off below 150 volt, high voltage cut off above 300 volt and time delay.	Each	2	6896.00	13,792.00
15	Supply, fixing, testing & commissioning of 4 module cover plate, 20A starter, 25 A socket, 25A plug for AC, water cooler.	Set	2	2285.00	4,570.00

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
16	Wiring of power plug for AC with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	20	166.00	3,320.00
17	Supply, fixing, testing and commissioning of integral type LED Street light Fittings of IP 66 rating (bracket light) complete with 1 X 25 watt LED lamp, driver etc.	Set	4	5008.00	20,032.00
18	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	2	4038.00	8,076.00
19	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	30	29.00	870.00
20	Supplying and fixing 4 way (4 + 12), Double door TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)	Each	1	7567.00	7,567.00
21	Supplying and fixing 5 amps to 32 amps rating, 240 volts, "C" curve, miniature circuit breaker suitable for inductive load of Single poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Set	8	174.00	1,392.00
22	Supplying and fixing 63A rating, four pole, (three phase and neutral), 415 volts, MCB, having 10kA short circuit current rating with 'C' curve in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	1	1701.00	1,701.00
23	Supply of 1.1 kV grade, XLPE insulated, armoured, PVC outer sheath aluminium cable of following sizes.				
a)	4 C X 16 sqmm	Metre	100	362.00	36,200.00
24	Laying of one number XLPE power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	80	90.00	7,200.00
25	Laying of one number XLPE power cable of 1.1 KV grade of following size in the existing pipe as required.				
i)	Upto 35 sq mm	Metre	80	17.00	1,360.00
26	Providing, laying following dia pipe in ground as required				
a)	40 mm dia	Metre	80	88.00	7,040.00
27	Laying of following size cable in the existing masonry duct as required				
i)	Upto 35 sq mm	Metre	10	12.00	120.00
28	Laying and fixing of one number XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	10	24.00	240.00
29	Supplying and making indoor end termination with brass compression gland and aluminium lugs for following size of XLPE aluminium conductor cable of 1.1 KV grade as required.				
i)	4 X 16 sq. mm	Each	2	253.00	506.00
30	Total Amount				268,882.00
31	Misc and unforeseen works				25,000.00
<b>32</b>	<b>Total</b>				<b>562,764.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**ILLUMINATION OF RAILWAY/IN-PLANT YARD**

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Supply, erection, testing and commissioning of 30 mt High Mast tower along with feeder pillar box consisting with astronomical timer, aviation obstruction light, earthing (2no) with earthing connector by 25x5 mm GI earth strip as per specification enclosed.				
a)	Supply	Each	30	414652.00	12,439,560.00
b)	Erection, testing & commissioning	Each	30	41825.00	1,254,750.00
2	Supply & construction of RCC foundation with M-20 grade concrete by considering soil bearing capacity as 10 Ton per sq mt.	Each	30	224675.00	6,740,250.00
3	Supply, erection, testing and commissioning of integral type 350 watt LED high mast flood light luminaires with driver and other accessories enclosed.		0		-
a)	Supply	Each	480	37605.00	18,050,400.00
b)	Erection, testing & commissioning	Each	480	3793.00	1,820,640.00
4	Earthing with G.I. earth pipe (ISI marked) 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with CI cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	60	3926.00	235,560.00
5	Supplying and laying 6 SWG G.I. wire at 0.50M below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	900	23.00	20,700.00
6	Drawing, Designing, Supply, Erection, Testing & Commissioning of outdoor type and ingress protection of IP-66 rated main LT Panel for inplant Yard Illumination including 2 no 160 A 4Pole microprocessor based adjustable thermal & magnetic setting rated MCCB-2 no as incommmer (Icu=35 kA, Ics=100% Icu, 1 set 250A rated TPN tin plated Cu busbar(current density >1.6A/sqmm), 1 no digital Ammeter, 1no digital Voltmeter, with phase selection option, 1 set phase indication LED lamp(R-Y-B), 40 A 4P 'C' curve 40kA rated MCB- 6 no as outgoing.		0		-
a)	Supply	Set	5	348350.00	1,741,750.00
b)	Erection, testing & commissioning	Set	5	17235.00	86,175.00
7	Supply of 1.1 kV grade, XLPE insulated, armoured, FRLS, PVC outer sheath aluminium cable of following sizes conforming to IS:7098-(Pt-I)-1998 or latest and ISI marked.		0		-
a)	3.5 C X 120 sqmm	Metre	2000	900.00	1,800,000.00
b)	3.5 C X 70 sqmm	Metre	3000	861.00	2,583,000.00
c)	3.5 C X 35 sqmm	Metre	4000	670.00	2,680,000.00
d)	4 C X 16 sqmm	Metre	3000	462.00	1,386,000.00
8	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size direct in ground of min 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				-
i)	Upto 70 sq mm	Metre	8000	100.00	800,000.00
ii)	Above 95 sq.mm and upto 185 sqmm	Metre	2000	118.00	236,000.00
9	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size in the existing HDPE pipe as required.		0		-
i)	Upto 70 sq mm	Metre	8000	14.00	112,000.00
ii)	Above 95 sq.mm and upto 185 sqmm	Metre	2000	32.00	64,000.00



SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
10	Providing, laying following dia HDPE pipe(IS:4984-2016 or latest) in ground as required (ISI marked)		0		-
a)	40 mm dia	Metre	2400	94.00	225,600.00
11	Laying of following size XLPE insulated, armoured, FRLS, PVC outer sheath cable in the existing masonry duct as required		0		-
i)	Upto 35 sq mm	Metre	750	14.00	10,500.00
12	Laying and fixing of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size on wall surface as required.		0		-
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	750	26.00	19,500.00
13	Supplying and making indoor end termination with double ended brass compression gland and aluminium lugs for following size of XLPE insulated, armoured, FRLS, PVC outer sheath, aluminium conductor cable of 1.1 KV grade as required. (ISI marked)		0		-
i)	3.5 x 120 sqmm	Each	24	518.00	12,432.00
ii)	3.5 X 70 sq. mm	Each	60		-
iii)	3.5 X 35 sq. mm	Each	60	292.00	17,520.00
iv)	4 X 16 sq. mm	Each	120	264.00	31,680.00
14	Supply of 100 KVA ,11/0.433 KV,50 hz, oil immersed, naturally cooled ONAN, vector group Dyn - 11, Copper wound distribution type outdoor transformer complete with all accessories including one spare barrel of 200 litres of transformers oil	No	6	350000	2,100,000.00
(ii)	Erection, testing & commissioning	No	6	35000	210,000.00
15	Supply of 3 Core,185 sqmm, 11KV(E),XLPE insulated , PVC inner & outer sheath , armoured , aluminium cable	Mtr	2500	925	2,312,500.00
16	Laying of one no 3 Core, 185 sqmm, 11 KV (E) XLPE insulated armoured cable direct in ground including excavation,sand cushioning, protective brick covering and refilling the trench etc as required	Mtr	2500	324	810,000.00
17	Supply and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrule and other jointing materials, for 3C of 120 to 240 Sq. mm of 3 core, XLPE aluminium/ copper conductor cable of 33 kV grade as required.		0		-
a	Supply	Each	12	16268.00	195,216.00
b	Erection	Each	12	1178.00	14,136.00
18	Termination	Nos	24	1052.00	25,248.00
19	Misc and unforeseen works	LS		100000	100,000.00
<b>20</b>	<b>TOTAL AMOUNT</b>				<b>58,135,117.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FURTLIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**ILLUMINATION OF PATHWAY FOR GDR CHECK**

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Supply, erection, testing and commissioning including foundation by M-15 grade concrete for 3.0M long octagonal pole for path way luminaries including the arm bracket of 0.5 mtr long and 70mm top cap.	No	62	5718.00	354,516.00
2	Supply, fixing, testing and commissioning of outdoor integral type LED Street light Fittings IP-65 (bracket light) complete with 1 X 20 watt LED lamp, driver etc. (ISI marked)	Set	62	3187.00	197,594.00
3	Earthing with G.I. earth pipe (ISI marked) 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with CI cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	12	3803.00	45,636.00
4	Supplying and laying 6 SWG G.I. wire at 0.50M below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	150	24.00	3,600.00
5	Drawing, Designing, Supply, Erection, Testing & Commissioning of LT Panel for GDR Pathway illumination and with ingress protection of IP-66 rated including 1 no 63A 4Pole MCCB-1 no as incommmer, 1 set 125A rated TPN tin plated Cu busbar (current density >1.6A/sqmm), 1 set phase indication LED lamp(R-Y-B), 1 no Digital Ammeter, 1 no digital Voltmeter with phase selection option, Astronomical Timer & contactor for 12 hrs supply provision, 6A 4P 'C' curve 10kA rated MCB- 3 no (for outgoing).				
a	Supply	Set	1	55750.00	55,750.00
b	Erection, testing & commissioning	Set	1	6075.00	6,075.00
6	Supply of 1.1 kV grade, XLPE insulated, armoured, FRLS, PVC outer sheath aluminium cable of following sizes conforming to IS:7098-(Pt-I)-1998 or latest and ISI marked.				
a)	3.5 C X 25 sqmm	Metre	1200	541.00	649,200.00
7	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	950	100.00	95,000.00
8	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size in the existing HDPE pipe as required.				
i)	Upto 35 sq mm	Metre	950	19.00	18,050.00
9	Providing, laying following dia HDPE pipe(IS:4984-2016 or latest) in ground as required (ISI marked)				
a)	40 mm dia (PN-6, PE-63)	Metre	950	94.00	89,300.00
10	Laying of following size XLPE insulated, armoured, FRLS, PVC outer sheath cable in the existing masonry duct as required				
i)	Upto 35 sq mm	Metre	120	14.00	1,680.00
11	Laying and fixing of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	120	26.00	3,120.00

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
12	Supplying and making indoor end termination with double ended brass compression gland and aluminium lugs for following size of XLPE insulated, armoured, FRLS, PVC outer sheath, aluminium conductor cable of 1.1 KV grade as required. (ISI marked)				
i)	3½ X 25 sq. mm	Each	130	266.00	34,580.00
13	Supplying and making straight through joint with cast resin compound including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE insulated, armoured, FRLS, PVC outer sheath, aluminium conductor cable of 1.1 KV grade as required (ISI marked)				
i)	3½ X 25 sq. mm	Each	2	1465.00	2,930.00
14	Misc and unforeseen works				100,000.00
15	<b>TOTAL</b>				<b>1,657,031.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FURTLIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**

**LT POWER SUPPLY ARRANGEMENT FOR INPLANT YARD**

SI No	Description of Item	Unit	QTY	Rate (Rs)	AMOUNT (Rs.)
	<b>MAIN LT PANEL</b>				
1	Supply, erection, testing & commissioning of Main LT cubicle panel comprising of 4 no, electrolytic grade, tin plated, copper busbar of capacity 1000 A. <b>Incomer:</b> 2no, 800 A, 50 kA for 1 sec, four pole, electrically draw out type Air Circuit Breaker with microprocessor based intellegent protection releases i.e over current, short circuit, earth fault, under voltage release as incomer & 1 no same capacity circuit breaker without any release as Bus Coupler with mechanical and electrical interlocking arrangement. <b>Metering:</b> 2 no Analog ammeter & voltmeter with selector switch, 2 no digital energy meter, 800/5 Amp CT of accuracy class 1.0 and burden 15 VA, LED type indication lamp as per the direction of EIC and approved drawing. <b>Outgoing:</b> MCCB: FP, 630A, 50 kA, Adjustable thermal & magnetic setting - 2 nos, FP, 125A, 35 kA, Adjustable thermal & magnetic setting-				
a)	Supply	Each	1	2021725.00	2,021,725.00
b)	Erection, testing & commissioning	Each	1	168300.00	168,300.00
	<b>LT CABLE WORK</b>				
2	Supply of 1.1 kV grade, XLPE insulated, armoured, FRLS, PVC outer sheath aluminium cable of following sizes conforming to IS:7098-(Pt-I)-1998 or latest and ISI marked.				
a)	4 C X 95 sqmm	Metre	500	865.00	432,500.00
b)	4 C X 35 sqmm	Metre	3000	321.00	963,000.00
c)	4 C X 16 sqmm	Metre	300	234.00	70,200.00
3	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	2650	206.00	545,900.00
ii)	Above 95 sq. mm and upto 185 sq. mm	Metre	400	234.00	93,600.00
4	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size in the existing HDPE pipe as required.				
i)	Upto 35 sq mm	Metre	2650	30.00	79,500.00
ii)	Above 95 sq. mm and upto 185 sq. mm	Metre	400	63.00	25,200.00
5	Providing, laying following dia HDPE pipe(IS:4984-2016 or latest) in ground as required (ISI marked)				
a)	90 mm dia (PN-6, PE-80)	Metre	400	336.00	134,400.00
b)	50 mm dia (PN-6, PE-63)	Metre	2650	127.00	336,550.00
6	Laying of following size XLPE insulated, armoured, FRLS, PVC outer sheathcable in the existing masonary duct as required				
i)	Upto 35 sq mm	Metre	350	23.00	8,050.00
ii)	Above 95 sq. mm and upto 185 sq. mm	Metre	50	51.00	2,550.00

SI No	Description of Item	Unit	QTY	Rate (Rs)	AMOUNT (Rs.)
7	Laying and fixing of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	350	37.00	12,950.00
ii)	Above 95 sq. mm and upto 185 sq. mm (clamped with 40x3mm MS flat clamp)	Metre	50	119.00	5,950.00
8	Supplying and making indoor end termination with double ended brass compression gland and aluminium lugs for following size of XLPE insulated, armoured, FRLS, PVC outer sheath, aluminium conductor cable of 1.1 KV grade as required. (ISI marked)				
i)	4 X 95 sq. mm	Each	2	416.00	832.00
ii)	4 X 35 sq. mm	Each	12	275.00	3,300.00
iii)	4 X 16 sq. mm	Each	6	244.00	1,464.00
9	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required				
i)	4 X 95 sq. mm	Each	1	2795.00	2,795.00
ii)	4 X 35 sq. mm	Each	3	2028.00	6,084.00
	<b>SAFETY ITEMS</b>				
10	Supply & erection of MS chequered plate of 600 X 400 X 7mm (thick) to cover the cable trench as required.	Each	6	2173.00	13,038.00
11	Supply, erection & fixing of ISI marked CO <sub>2</sub> fire extinguisher suitable for 6.5 Kg.	Each	2	11822.00	23,644.00
12	Supply, testing & laying of 11kV Rubber Mat for electrical insulation purposes of size 6 ft X 3 ft X 0.5 at both the sub - station.	Each	4	4607.00	18,428.00
13	Supply & fixing of 6 No, GI fire bucket made from 24 SWG sheet of capacity 9 litre fitted on MS 50mm X 50mm X 6mm angle iron structure filled with clean & dry sand.	Set	1	1695.00	1,695.00
14	Supply & erection of shock treatment chart covered with glass & aluminium frame.	Each	2	408.00	816.00
15	Supply and fixing of Schematic data on metal sheet of size 1200mmX600mm with aluminium frame	Each	2	5169.00	10,338.00
16	Supply & fixing of schematic diagram of HT/LT installation of suitable size.	Each	2	2585.00	5,170.00
17	Supply & erection of cable route marker for HT/LT cable made of CI plate duly engraved "Danger 11kV HT cable" & "440 V Cable".	Each	50	342.00	17,100.00
	<b>Provision of Lightning Protection</b>				
18	Providing and fixing of lightning conductor finial (Lightning Arrester), made of 25 mm dia 300mm long, copper tube, having single prong at top, with 85 mm dia 3mm thick copper base plate including holes etc. complete as required.	Each	4	411.00	1,644.00
19	Providing and fixing testing joint, made of 20 mm X 3 mm thick copper strip, 125 mm long, with 4 nos. of tinned brass bolts, nuts, chuck nuts and spring washers etc. complete as required.	Each	4	99.00	396.00

SI No	Description of Item	Unit	QTY	Rate (Rs)	AMOUNT (Rs.)
20	Electrification of Switching Room	LS		100000.00	100,000.00
<b>21</b>	<b>Total</b>				<b>5,107,119.00</b>
22	Misc. and Unfoeseen Work				100,000.00
<b>23</b>	<b>Total</b>				<b>5,207,119.00</b>
<b>24</b>	<b>Civil Work</b>				
25	Provision of Switching Room	Sqm	9		

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ORISSA**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**DG SUPPLY THROUGH CABLE FROM SS-4**

SI No	Description of Item	Unit	QTY	Rate (Rs)	AMOUNT (Rs.)
	<b>MAIN LT PANEL</b>				
1	Switch Cubicle consisting with 160A MCCB as I/C along with Busbar and and O/G MCCB of 125A - 2 no and other accessories.				
a)	Supply	Each	1	95000.00	95,000.00
b)	Erection, testing & commissioning	Each	1	10500.00	10,500.00
	<b>LT CABLE WORK</b>				
2	Supply of 1.1 kV grade, XLPE insulated, armoured, FRLS, PVC outer sheath aluminium cable of following sizes conforming to IS:7098-(Pt-I)-1998 or latest and ISI marked.				
a)	4 C X 95 sqmm	Metre	500	865.00	432,500.00
3	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Above 95 sq. mm and upto 185 sq. mm	Metre	400	234.00	93,600.00
4	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size in the existing HDPE pipe as required.				
i)	Above 95 sq. mm and upto 185 sq. mm	Metre	400	63.00	25,200.00
5	Providing, laying following dia HDPE pipe(IS:4984-2016 or latest) in ground as required (ISI marked)				
a)	90 mm dia (PN-6, PE-80)	Metre	400	336.00	134,400.00
6	Laying of following size XLPE insulated, armoured, FRLS, PVC outer sheathcable in the existing masonry duct as required				
i)	Above 95 sq. mm and upto 185 sq. mm	Metre	50	51.00	2,550.00
7	Laying and fixing of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Above 95 sq. mm and upto 185 sq. mm (clamped with 40x3mm MS flat clamp)	Metre	50	119.00	5,950.00
8	Supplying and making indoor end termination with double ended brass compression gland and aluminium lugs for following size of XLPE insulated, armoured, FRLS, PVC outer sheath, aluminium conductor cable of 1.1 KV grade as required. (ISI marked)				
i)	4 X 95 sq. mm	Each	2	416.00	832.00
9	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required				

<b>SI No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>QTY</b>	<b>Rate (Rs)</b>	<b>AMOUNT (Rs.)</b>
i)	4 X 95 sq. mm	Each	1	2795.00	2,795.00
10	Electrification of DG Room	LS		50000.00	50,000.00
<b>11</b>	<b>Total</b>				<b>853,327.00</b>
12	Misc. and Unfoeseen Work				25,000.00
<b>13</b>	<b>Total</b>				<b>878,327.00</b>



**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FURTLIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**MODIFICATION OF 11 KV OVERHEAD LINE for 4 Locations**

SI No	Description of Item	Unit	Qty	Rate	Amount
1	Supply of 2nd hand rail pole 60.34 KG / Mtr for Double pole, tripple pole & four pole structure	MT	12	39,290.00	471,480.00
2	Erection of steel tubular and rail pole strut in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation of 0.34 cum including excavation to be painted with primer & finish paint as required.				
a.	Erection	Each	30	4,994.00	149,820.00
3	Supply and erection of galvanised stay set for 11 kV over head lines complete with 19/ 20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm thick, thimble, stay clamps, turn buckle (20 mm X 600 mm), 7/ 4.00 mm dia G.I. stay wire and 11 kV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation of 0.28 cum including excavation of 1.2 cum and refilling etc. as required.				
a.	Supply	set	20	1,469.00	29,380.00
b.	Erection	set	20	2,704.00	54,080.00
4	Supply and erection of 11 kV pin insulator complete with large steel head GI pin, nuts, washers etc as required.				
a.	Supply	Set	20	135.00	2,700.00
b.	Erection	Set	20	97.00	1,940.00
5	Supply & Erection of 11 kV disc insulator for over head lines with galvanised insulator fittings, ball and socket type and complete with galvanised strain clamps, bolts, nuts, washers etc as required.				
a.	Supply	Set	20	782.00	15,640.00
b.	Erection	Set	20	142.00	2,840.00
6	Supply of 3 Core,185 sqmm, 11KV(E),XLPE insulated , PVC inner & outer sheath , armoured , aluminium cable	Mtr	2500	925.00	2,312,500.00
7	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 kV grade of following size direct in ground including excavation of 42 cum , sand cushioning 8.76 cum , protective covering and refilling the trench etc. as required.				
a.	Upto 185 sq. mm	Mtr	2500	301.00	752,500.00
8	Laying of XLPE cable of 11 kV grade in the existing masonry open duct as required.				
a.	Upto 185 sq. mm	Mtr	2500	32.00	80,000.00
9	Supply and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrule and other jointing materials, for 3C120 to 240 Sq. mm of 3 core, XLPE aluminium/ copper conductor cable of 11 kV grade as required.				
a.	Supply	Each	12	9,468.00	113,616.00
b.	Erection	Each	12	771.00	9,252.00

SI No	Description of Item	Unit	Qty	Rate	Amount
10	Supply and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 3CX120 to 150Sq. mm size , XLPE aluminium/ copper conductor cable of 11 kV grade as required.				
a.	Supply	Each	10	7,491.00	74,910.00
b.	Erection	Each	10	771.00	7,710.00
11	Laying and fixing of XLPE power cable of above 95 sq. mm and upto 185 sq. mm (clamped with 25/ 40x3mm MS flat clamp) size on pole as required.				
a.	Supply	Mtr	2000	43.00	86,000.00
b.	Erection	Mtr	2000	43.00	86,000.00
12	Supply and making cable route marker with cement concrete 1:2:4 ( 1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm normal size ) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10 cm including inscription duly engraved as required.	Each	40	377.00	15,080.00
13	Supply and laying of 90 mm dia (PE-80, PN-6, SDR-17) HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 4984/1995 complete with fitting and cutting, jointing etc..direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.				
a.	Supply	Mtr	200	336.00	137,250.00
b.	Erection	Mtr	200	75.00	15,000.00
14	Coupler for HDPE pipe 90 mm	Each	100	119.00	11,900.00
15	Providing, laying and fixing 150 mm dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc.				
a	Supply	Mtr	40	1,233.00	49,320.00
b	Erection	Mtr	40	68.00	2,720.00
16	Providing, laying and fixing 250 mm dia G.I. pipe (Heavy class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc.				
a	Supply	Mtr	60	2,596.00	155,760.00
b	Erection	Mtr	60	68.00	4,080.00
17	Supply & fixing of 1.2 mtr long, 75 mm X 40 mm X 6 mm MS channel iron cross arm bracket conductors with 50 mm X 6 mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X 16 mm MS nut bolt & washer. MS flat of length 0.225 mtr to be welded with the bracket for anti-slipping. Entire bracket with nut bolt to be painted with primer & finish paint as required.	Set	16	1,026.00	16,416.00
18	Supply & fixing of 2.2 mtr long, 75 mm X 40 mm X 6 mm MS channel iron cross arm bracket conductors with 50 mm X 6 mm MS flat iron clamp of length 0.5 mtr to be fixed by 50mm X 16 mm nut bolt & washer . Entire bracket with nut bolt to be painted with primer & finish paint as required.	Each	16	1,537.00	24,592.00
19	Supply & fixing of 2.2 mtr long, 50 mm X 6 mm MS angle iron bracket with 50 mm X 6 mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X 16 mm MS nut bolt & washer. Entire bracket with nut bolt to be painted with primer & finish paint as required.	Each	16	1,200.00	19,200.00

SI No	Description of Item	Unit	Qty	Rate	Amount
20	Supply and fixing of 65 mmX6 mm MS angle iron bracket of various length with 50 mm X6mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X16 mm MS nut bolt and washer. Entire bracket with nut bolt to be painted with primer and finish paint as required.	Mtr	20	531.00	10,620.00
21	Supply of 8 SWG G.I Wire (guard wire)	Kg	10	68.00	680.00
22	Erection of G.I wire no 8 SWG including binding etc as required (guard wire)	Kg	10	22.00	220.00
23	Earthing with GI earth pipe 4.5 mtr long, 40 mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc with charcoal/coke and salt as required.				
a.	supply	Each	20	2,322.00	46,440.00
b.	Erection	Each	20	1,455.00	29,100.00
24	Providing and fixing 25mm x 5mm GI strip on surface or in recess for connections etc. as required				
a.	supply	Mtr	40	62.00	2,480.00
b.	Erection	Mtr	40	72.00	2,880.00
25	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/submain wiring/ cable as required.				
a.	Supply	Mtr	50	10.00	500.00
b.	Erection	Mtr	50	14.00	700.00
26	Supplyand erection of three piece nonlinear resistor type lightning arrester suitable for 3 wire, 11 kV overhead lines with rated voltage 9 kV (rms) with a nominal discharge current rating of 5 kA and complete with galvanised clamping arrangement,G.I. bolts, nuts, washers etc. as required.				
a.	Supply	Set	6	2,151.00	12,906.00
b.	Erection	Set	6	241.00	1,446.00
27	Pushing of Cable covered with HDPE pipe beneath Railway track with G. I pipe protection through jack push system ( double cable)	Mtr	100	2,588.00	258,800.00
28	Unforseen work	LS			50,000.00
29	Providing and fixing H.T./LT danger notice plate of 250 mm X 200 mm,complete with clamp & fastners made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side mentioning Voltage as required				
a.	Supply	Each	20	91.00	1,820.00
b.	Erection	Each	20	77.00	1,540.00
c	AAAC Panther Conductor	Km	2	60,000.00	120,000.00
d	Erection	Km	2	10,000.00	20,000.00
30	<b>Misc Works</b>				250,000.00
31	<b>Dismalting Works</b>				
a	Dismantling of Rail Pole	Nos	8	1,445.00	11,560.00
b.	Opening of Line DP Channel	Set	8	146.00	1,168.00
c	opening of 11 kV conductor	KM	0.5	7,794.00	3,897.00
d	11 kV Pin Insulator with Pin	No.	8	75.00	600.00
e	D.P Cross Bracing	Set	4	146.00	584.00
32	<b>Total</b>				<b>5,529,627.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED TALCHER**  
**FURTLIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**MODIFICATION OF 33 KV OVERHEAD LINE for 2 Locations**

SI No	Description of Item	Unit	Qty	Rate	Amount
1	Supply of 2nd hand rail pole 60.34 KG / Mtr for Double pole, tripple pole & four pole structure	MT	9.5	40197.00	381871.50
2	Supply and erection of galvanised stay set for 33 kV over head lines complete with 19/ 20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm thick, thimble, stay clamps, turn buckle (20 mm X 600 mm), 7/ 4.00 mm dia G.I. stay wire and 11 kV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation of 0.28 cum including excavation of 1.2 cum and refilling etc. as required.				
a	Supply	set	12	1274.00	15288.00
b	Erection	set	12	2346.00	28152.00
3	Supply & Erection of 33 kV composite polymer type disc insulator for over head lines with galvanised insulator fittings, ball and socket type and complete with galvanised strain clamps, bolts, nuts, washers etc as required.				
a	Supply	Set	18	3376.00	60,768.00
b	Erection	Set	18	137.00	2,466.00
4	Supply & Erection of 33 kV composite polymert type pin insulator for over head lines with galvanised insulator fittings, ball and socket type and complete with galvanised pin, bolts, nuts, washers etc as required.				
a	Supply	Set	18	2956.00	53,208.00
b	Erection	Set	18	113.00	2,034.00
6	Supply of 3 Core,185 sqmm, 11KV(E),XLPE insulated , PVC inner & outer sheath , armoured , aluminium cable	Mtr	1000	925.00	925000.00
6	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 33 kV grade of following size direct in ground including excavation of, sand cushioning, protective covering and refilling the trench etc. as required.				
a	Upto 185 sq. mm	Mtr	1000	301.00	301000.00
7	Laying of XLPE cable of 33 kV grade in the existing masonary open duct as required.				
a	Upto 120 sq. mm	Mtr	20	32.00	640.00
8	Supply and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrule and other jointing materials, for 3C of 120 to 240 Sq. mm of 3 core, XLPE aluminium/ copper conductor cable of 33 kV grade as required.				
a	Supply	Each	1	16268.00	16268.00
b	Erection	Each	1	1178.00	1178.00

SI No	Description of Item	Unit	Qty	Rate	Amount
9	Supply and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 3C of 120 to 150Sq. mm size , XLPE aluminium/ copper conductor cable of 33 kV grade as required.				
a	supply	Each	4	12160.00	48640.00
b	Erection	Each	4	1252.00	5008.00
10	Laying and fixing of one number XLPE power cable of above 95 sq. mm and upto 185 sq. mm (clamped with 25/ 40x3mm MS flat clamp) size on pole as required.				
a	supply	Mtr	50	42.00	2100.00
b	Erection	Mtr	50	41.00	2050.00
11	Supply and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including nscription duly engraved as required.	Each	4	361.00	1444.00
12	Supply and laying of 90 mm dia (PE-80, PN-6, SDR-17) HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 4984/1995 complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.				
a	Supply	Mtr	180	321.00	57780.00
b	Erection	Mtr	180	72.00	12960.00
13	Coupler for HDPE pipe 90 mm	Each	40	113.00	4520.00
14	Providing, laying and fixing 150 mm dia G.I. pipe (Medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc.				
a	Supply	Mtr	160	1177.00	188320.00
b	Erection	Mtr	160	66.00	10560.00
15	Providing, laying and fixing 150 mm dia G.I. pipe (Heavy class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc.				
a	Supply	Mtr	50	2478.00	123900.00
b	Erection	Mtr	50	66.00	3300.00
16	Supply & fixing of 1.2 mtr long, 75 mm X 40 mm X 6 mm MS channel iron cross arm bracket conductors with 50 mm X 6 mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X 16 mm MS nut bolt & washer. MS flat of length 0.225 mtr to be welded with the bracket for anti-slipping. Entire bracket with nut bolt to be painted with primer & finish paint as required.	Set	8	979.00	7,832.00
17	Supply & fixing of 2.2 mtr long, 75 mm X 40 mm X 6 mm MS channel iron cross arm bracket with 50 mm X 6 mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X 16 mm MS nut bolt & washer. Entire bracket with nut bolt to be painted with primer & finish paint as required.	Each	2	1467.00	2,934.00
18	Supply & fixing of 2.2 mtr long, 50 mm X 6 mm MS angle iron bracket with 50 mm X 6 mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X 16 mm MS nut bolt & washer. Entire bracket with nut bolt to be painted with primer & finish paint as required.	Each	30	1146.00	34,380.00

SI No	Description of Item	Unit	Qty	Rate	Amount
19	Supply and fixing of 65 mmX6 mm MS angle iron bracket of various length with 50 mm X6mm MS flat iron clamp of length 0.5 mtr to be fixed by 50 mm X16 mm MS nut bolt and washer. Entire bracket with nut bolt to be painted with primer and finish paint as required.	Mtr	8	507.00	4,056.00
20	Earthing with GI earth pipe 4.5 mtr long, 40 mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc with charcoal/coke and salt as required.				
a	Supply	Each	4	2217.00	8868.00
b	Erection	Each	4	12939.00	51756.00
21	Providing and fixing 25mm x 5mm GI strip on surface or in recess for connections etc. as required				
a	Supply	Mtr	20	59.00	1180.00
b	Erection	Mtr	20	68.00	1360.00
22	Supply and erection of three piece nonlinear resistor type lightning arrestor suitable for 3 wire, 33 kV overhead lines with rated voltage 9 kV (rms) with a nominal discharge current rating of 5 kA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.				
a	Supply	Set	2	3879.00	7758.00
b	Erection	Set	2	542.00	1084.00
23	Pushing of Cable covered with HDPE pipe beneath Railway track with G. I pipe protection through jack push system ( double cable)	Mtr	80	2471.00	197680.00
24	3 pin barbed wire				
a	supply	Mtr	20	8.00	160.00
b	Erection	Mtr	20	6.00	120.00
<b>25</b>	<b>Dismantling Works</b>				
a	Dismantling of Rail Pole ( rail pole / Tubular pole )	Nos	2	1379.00	2758.00
b	Opening of Line DP Channel	Set	1	140.00	140.00
c	opening of 33 kV conductor	KM	0.5	7439.00	3719.50
d	Insulators( Pin, disc & shackle )	No.	10	72.00	720.00
e	D.P Cross Bracing	Set	2	140.00	280.00
26	Unforseen work	LS			50000.00
27	Misc Works				100,000.00
<b>28</b>	<b>Total (Rs.)</b>				<b>2,725,241.00</b>
<b>28</b>	<b>Total (Rs.) for 02 nos.</b>				<b>5,450,482.00</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR**  
**PROPOSED TALCHER FERTILIZERS LIMITED,ORISSA**

**ELECTRICAL ENGINEERING ESTIMATE**  
**MODIFICATION OF POWER LINE CROSSING (132 KV) (Tentative)**

<b>Sl.No</b>	<b>Details of the works</b>	<b>Amount in Lakhs of Rs..</b>
1	Cost of Materials	175.84
2	Cost of Erection	54.53
3	<b>Total</b>	<b>230.37</b>
4	Supervision Charge @ 15 %	34.56
5	<b>Total</b>	<b>264.93</b>

**DETAILED PROJECT REPORT**  
**CONSTRUCTION OF NEW RAILWAY SIDING FOR TRANSPORTATION OF COAL-AMMONIA-UREA FOR PROPOSED**  
**TALCHER FERTILIZERS LIMITED,ORISSA**  
**ELECTRICAL ENGINEERING ESTIMATE**  
**ILLUMINATION OF COVERED SHED AREA**

SI No	Description of Item	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc. as required for service building, office, panel cabin etc.	Point	384	739.00	283,776.00
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper single core cable in surface/ recessed medium class PVC conduit as required				
a)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	2000	166.00	332,000.00
3	Supply, erection, testing and commissioning of 70W 6700K LED highbay luminaries with potted driver assembly of 4kV surge protection for internal and 10kV for external surge, Circular LED Wellglass with tapered fin design and exceptional thermal management along with IP66 protection.				
a)	Supply	Each	384	8949.00	3,436,416.00
b)	Erection, testing & commissioning	Each	384	903.00	346,752.00
4	Earthing with G.I. earth pipe (ISI marked) 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with CI cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	30	5227.00	156,810.00



5	Supplying and laying 6 SWG G.I. wire at 0.50M below ground level for conductor earth electrode, including connection/termination with GI thimble etc.as required.	Metre	300	44.00	13,200.00
6	Drawing, Designing, Supply, Erection, Testing & Commissioning of outdoor type and ingress protection of IP-66 rated main LT Panel for inplant Yard Illumination including 1 no 160 A 4Pole microprocessor based adjustable thermal & magnetic setting rated MCCB-1no as incommer (Icu=35 kA, Ics= 100% Icu, 1 set 250A rated TPN tin plated Cu busbar(current density >1.6A/sqmm), 1 no digital Ammeter, 1no digital Voltmeter, with phase selection option, 1 set phase indication LED lamp(R-Y-B), 40 A 4P 'C' curve 40kA rated MCB- 8 no as outgoing.				
a)	Supply	Set	1	348350.00	348,350.00
b)	Erection, testing & commissioning	Set	1	17235.00	17,235.00
7	Supply of 1.1 kV grade, XLPE insulated, armoured, FRLS, PVC outer sheath aluminium cable of following sizes conforming to IS:7098-(Pt-I)-1998 or latest and ISI marked.				
a)	3.5 C X 35 sqmm	Metre	500	617.40	308,700.00
b)	4 C X 16 sqmm	Metre	9000	407.00	3,663,000.00
8	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size direct in ground of minm 750mm depth including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
i)	Upto 35 sq mm	Metre	1700	100.00	170,000.00

9	Laying of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size in the existing HDPE pipe as required.				
i)	Upto 35 sq mm	Metre	1700	19.00	32,300.00
10	Providing, laying following dia HDPE pipe(IS:4984-2016 or latest) in ground as required (ISI marked)				
a)	40 mm dia	Metre	100	90.00	9,000.00
11	Laying of following size XLPE insulated, armoured, FRLS, PVC outer sheath cable in the existing masonry duct as required				
i)	Upto 35 sq mm	Metre	300	14.00	4,200.00
12	Laying and fixing of one number XLPE insulated, armoured, FRLS, PVC outer sheath power cable of 1.1 KV grade of following size on wall surface as required.				
i)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	7500	28.00	210,000.00
13	Supplying and making indoor end termination with double ended brass compression gland and aluminium lugs for following size of XLPE insulated, armoured, FRLS, PVC outer sheath, aluminium conductor cable of 1.1 KV grade as required. (ISI marked)				
i)	3.5 X 35 sq. mm	Each	4	312.00	1,248.00
ii)	4 X 16 sq. mm	Each	120	284.00	34,080.00
14	Misc and unforeseen works				100,000.00

9,467,067.00