

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e-TENDER No. CE/36/2018



AN ISO 9001-2015 PORT
ISPS CODE Compliant

**e-TENDER FOR “ Paving of Platform Along Side of 2nd Full Rake Wagon Handling
Line No. 8.”**

THROUGH E –TENDER ON WEB SITE

www.eprocure.gov.in

Due at 15:00 hrs on 04.10.2018

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT
e- PORTAL NOTICE INVITING ONLINE TENDER
e-TENDER No. CE/36/2018

**e-TENDER FOR “Paving of Platform Along Side of 2nd Full Rake Wagon Handling
Line No. 8”**

Due date & time : 04/10/2018 at 15.00 hrs.

Cover I opening : 05/10/2018 at 15.30 hrs.

Further details: www.eprocure.gov.in

Chief Engineer

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e-TENDER No. CE/36/2018

**e-TENDER FOR “Paving of Platform Along Side of 2nd Full Rake Wagon Handling
Line No. 8.”**

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EMD : Rs. 6,67,000/-

Tenders will be opened in Conference Room at the “Office of the Chief Engineer, Mormugao Port Trust”.

Due at 15.30 hrs. on 05/10/2018

MORMUGAO PORT TRUST

ENGINEERING (CIVIL) DEPARTMENT
NOTICE INVITING ONLINE TENDERS (NIOT)

Details about tender:

Tender inviting	CHIEF ENGINEER , MORMUGAO PORT TRUST	
e - Tender No.	e-TENDER No. CE/36/2018	
Name of Work	e-TENDER FOR “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”	
Bidding Type	Open (e-tender mode only)	
Tender Currency Type	Single	
Tender Currency Settings	Indian Rupee (INR)	
Tender Cost	Rs. 5,000 /-	Mode of Payment : e-Payment Only
EMD Cost	Rs. 6,67,000 /-	
Transaction fees (Processing fees payable by each Tenderer)	Free of Cost	
Payment of Tender Fee & EMD	<p>The Tender fee and EMD shall be paid in e-payment mode only. The EMD exemption Certificate from SSI/MSME/NSIC or any empowered Central/State Govt. Authority shall be submitted in electronic format (by scanning) while uploading the bid.</p> <p>Mode of Payment towards Tender Cost and EMD to be paid online through e-Payment mode before due date via :</p> <p>1.National Electronic Fund Transfer (NEFT) / Real-Time Gross Settlement RTGS). Tenderer requires download pre-printed Challan towards credit of ITG available on e-tender website and make its payment through any of their Bank.</p> <p>2. Internet Payment Gateway (Debit/ Credit Card of type VISA, MASTERCARD or RuPay.</p> <p>3.Net Banking: Payment can be made through the Internet Banking of Any Bank.</p> <p>Note: Any Payments made through NEFT/RTGS will take 24 hours for its reconciliation. Hence the payments through NEFT/RTGS should be made at least TWO BANK</p>	

	WORKING DAYS in advance before any due date and upload the scanned copy of challans in the e-Tender website as a token of payment.
Security Deposit	5 % of the contract value in the form Bank Guarantee from any Nationalised / Scheduled Bank, having its branch at Goa
Commencement Period	Within 10 days from date of receipt of Work order/LOI .
Period of Contract	06 Months (after release of site)
Qualifying Criteria :	<p><u>PRE-QUALIFICATION CRITERIA / BIDDING CONDITION</u></p> <ol style="list-style-type: none"> 1. The bidder or his parent company or joint venture or partnership should have Average Annual Financial Turnover during the last Three (3) years ending 31st March 2018 should be at least Rs. 200 Lakhs/- Auditors report in original certified by CA or statutory auditors, for the years 2015-16, 2016-17 and 2017-18 including relevant P/L a/c and balance sheet. However for Year 2017-2018 Provisional Certificate certified by Chartered Accountant shall be submitted. 2. The bidder or his parent company or Joint Venture or partnership should have thorough experience in similar works during the last 07 years prior to application due date, should be either of the following. <ol style="list-style-type: none"> i. Three similar completed works of contract value not less than Rs. 267.00 lakhs ii. Two similar completed works of contract value not less than Rs. 400.00 lakhs iii. One similar completed work of contract value not less than Rs. 533.00 lakhs <p>‘SIMILAR’ Works – means ” The works of paving of roads with asphalt/concrete/Paver Blocks or area development with Concrete/Asphaltic/Paver Blocks”</p> <p>Please Note: The Tenderers shall enclose the copy of Annual Financial Turnover for the year 2015-16, 2016-17 and 2017-18 (original copy certified by Chartered Accountant/ Statutory Auditor with Profit /Loss Account and balance sheet).The work order copies for similar works where experience is being claimed, successful completion certificates with performance certificate from clients indicating the date of completion, value of work done is required for the technical evaluation without which the technical scrutiny cannot be carried out and bid will be outright rejected without giving any clarification to the tenderers.</p>
Last Date & Time for Receipt of Bids	<p>04/10/2018 @ 15:00 Hrs.</p> <p>Note:- Hard copies of all relevant documents shall be submitted within 24 hrs after opening of Technical Bid (cover No. I)</p>
Bid Opening Date	Techno-commercial Bid (Cover-I) will be opened on 05/10/2018 @ 15:30 Hrs. Date of opening of price bid shall be notified after scrutiny and evaluation of Techno-commercial Bid.

Bid Validity	120 days from the last date fixed for receiving the tender.
Online Documents required to be submitted by scanning	<p>a. EMD in the form of e-mode only.</p> <p>b. Copy of documents viz. Work Order, Completion certificate with performance, Financial Turnover, Auditor's report, Balance sheet, P/L account statement etc. Financial Turnover Certificate as at Appendix-II.</p> <p>c. Entire Tender document, each page and form duly signed and filled in.</p>
Address for communication:	<p>Chief Engineer, Engineering (Civil) Department., Mormugao Port Trust, 2nd Floor, A.O. Bldg, Headland Sada, Mormugao, Goa – 403804.</p>
Contact Details	<p>For Tender related queries --- Phone :0832 – 2594617 ; For e-Tendering help contact:</p> <p>The Help Desk will be your first point of contact at NIC.</p> <p>Telephone: For any queries, please call 24 x 7 Helpdesk No.: 0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787</p> <p>Email: Kindly send your Technical queries to cppp-nic@nic.in</p> <p>Note- Bidders are requested to kindly mention the URL of the Portal and Tender Id in the subject while emailing any issue with the Contact details.</p>
Website	www.eprocure.gov.in

Format and Signing of Bid

The Price Bid to be submitted on-line shall be signed digitally by a person or persons duly authorized to sign on behalf of the Bidders.

The Bid shall contain no alterations, additions, except those to comply with instructions issued by the Port.



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INSTRUCTIONS FOR ONLINE BID SUBMISSION

1. Bidders to follow the following procedure to submit the bids online through the e-tender site www.eprocure.gov.in. Bidder should do the registration in the tender site using the '[Vendor Registration](#)' link available on home page.
2. Then the Digital Signature of SIFY/TCS/nCode or any Certifying Authority is to be registered after logging into the site.
3. Bidder can use 'Document Library' menu to upload technical documents in advance as required for various tenders and use them during bid submission. This will facilitate the bid submission process by reducing time.
4. Bidder may get the tenders published documents in 'Tender free view' link in home page and download the required documents/tender schedules by free of cost for read only.
5. Bidder then login into the site using the secured log in by giving the user id/password chosen during registration and password of the DSC/e-token.
6. Only one DSC should be used for a bidder and should not be misused by others.
7. Bidder should read the tender schedules carefully and submit the documents as asked, otherwise, the bid will be rejected.
8. If there are any clarifications, this may be obtained using clarifications or during the pre-bid meeting. Bidder should take into account of the Addendum/Corrigendum's published before submitting the bids online.
10. Bidder must fill the bid documents to be submitted as indicated in the tender schedule and they should use the uploaded format in website.
11. Bidder shall make payments towards the EMD and tender fee as specified in the tender through e-payment mode only and shall be submitted in electronic format through online (by scanning) while uploading the bid.

To claim exemption from EMD, exemption Certificate from SSI/MSME/NSIC or any empowered Central/State Govt. Authority shall be submitted in electronic format (by scanning) while uploading the bid.

However, either a Soft copy (scanned copy) or Hard copy of EMD/ EMD Exemption Certificate from SSI/MSME/NSIC or any empowered Central/State Govt. Authority & also e-payment of Tender Fee shall confirm the opening of the Technical Bid of the respective firms.

12. Bidder selects the tender which he is interested using Tender search option initially the tender will be available in vendor unapplied stage.
13. From vendor unapplied stage Bidder has to request the tender document by clicking on Request tender form level-1 icon.

14. After requested the tender, same will move to vendor In progress.
15. The bidder has to select 'Edit Attachment Level 1' icon under action menu of particular tender.
16. The Bidder has to enter the password of the DSC/e-token and the required bid documents have to be uploaded one by one as indicated.
17. The vendor has to quote the rates in provided excel sheet (BOQ) by filling the highlighted in blue color cells and should be updated. *The BOQ document, if found modified by the bidder, his bid will be rejected.*
18. The tendering system will give a successful bid updation message & then a bid summary will be shown with the bid no. & the date & time of submission of the bid with all other relevant details. The bidder has to submit the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
19. The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid.
20. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
21. For any clarifications with the Tender Inviting Authority (TIA), the bid number can be used as a reference.
22. Bidder should log into the site well in advance for bid submission so that he submits the bid in time (i.e.) on or before the bid submission time. If there is any delay, due to other issues, bidder only is responsible.
23. Each document to be uploaded online for the tenders should be less than 5 MB and BOQ and Technical bid should be less than 2 MB. If any document is more than 5 MB, it can be reduced by scanning at low resolution and the same can be uploaded.
24. The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidder should follow this time during bid submission.
25. All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
26. The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used Data storage encryption of sensitive fields is done.
27. Any documents that are uploaded to the server are subjected to symmetric encryption using a generated symmetric key. Further this key is subjected to asymmetric encryption using buyers public keys. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.
28. Tenderer is required to submit their tender through online in the form of Two cover system on or before due date of closing time. The tender received after the due date and time will not be entertained.

Tender Document can be submitted online only in the designated two cover system on the e-tender website www.eprocure.gov.in on or before the due date and time. Tenderer should submit the tender as per specification indicated in BOQ and accordance with the Instructions to Tenderers, Tender Information Sheet, General Conditions of Contract and Special Conditions of Contract, etc.

29. Technical and Commercial bid(Cover-I) : The tenderer shall upload in the e-portal website, in the form of scanned copy, documents required as per Pre Qualification Criteria, Test of Responsiveness and other Appendix (Form of Tender, Annual Financial turnover, Power of Attorney etc.) as specified in the Tender.
30. Price Bid (BOQ) –(cover-II) : Price should be quoted in Online “BOQ”. Price should be quoted in a spread sheet file (.xls format) available in e- tender portal only. Any indication of ‘Quoted price’ in the online technical bid documents shall be lead to rejection of the bid outright. For evaluation purpose, the uploaded offer documents will be treated as authentic and final. The price bid submitted through e-tender mode only will be taken up for the purpose for evaluation.
31. Other conditions:
 - a. There are no significant inconsistencies between the proposal and the supporting documents.
 - b. The Port Trust reserves the right to reject any tender which in its opinion is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Port Trust in respect of such Tenders.
 - c. The Port Trust would have the right to seek clarification on Techno- commercial conditions wherever necessary.
 - d. Since the tender involves selection based on pre-qualification criteria and technical specification, the Deputy Conservator will examine and seek clarification if any and list out the firms, which are found technically suitable and Cover – II Price Bid of such tenders only will be opened and EMD will be returned to the disqualified tenderers.
 - e. The date and time will be intimated to tenderers whose offers are found suitable and Cover – II of such tenderers will be opened on the specified time and date.

Chief Engineer
MORMUGAO PORT TRUST

MORMUGAO PORT TRUST
ENGINEERING CIVIL DEPARTMENT
TENDER NO CE/36/2018

“Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8”
ELECTRONIC PAYMENT SYSTEM MANDATE FORM

The details for processing the payment through RTGS as below:-

Name of the Beneficiary	MORMUGAO PORT TRUST GENERAL ACCOUNT
Address of Beneficiary with PIN Code	Administrative Office Building, Headland Sada, GOA - 403804
PAN Number	AAALMO293P
Name & Mobile Number of responsible person	Raghunath Morajkar, 9423059702 Raghunath.marajkar@mptgoa.com
Name of the Bank and Branch	STATE BANK OF INDIA, Harbour Branch
Bank Telephone No.	0832-2520212
Address of the Bank	STATE BANK OF INDIA MORMUGAO HARBOUR, GOA – 403803
MICR Code of the Bank	403002024
IFSC Code No.	SBIN0002164
Type of Account and Branch Code	Current Account / Branch Code:- 002164
Account number of the Bank	10438017048
	MPT GENERAL ACCOUNT
Beneficiary E-mail ID	cashmpt@mptgoa.gov.in

INSTRUCTION TO TENDERERS (ITT)

Tenders are invited on behalf of Mormugao Port Trust (MPT), from experienced tenderers who are fulfilling the Minimum Eligibility Criteria (MEC) as detailed at clause 1.5.1 of the tender document for the work of **“Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8”**

- 1.1 Bidder is required to submit their tender offer in the form of two cover system on or before due date (Refer NIOT). The time of opening of technical bid is as indicated at NIOT.
- 1.2 The Notice Inviting Online Tenders (NIOT) issued by MPT forms part of the Tendering Documents.
- 1.4 The Bidder shall make his all-out efforts to ensure the correctness of Documents available on the Web site. Any queries / doubts may be brought out by the bidders in Pre bid meeting.
- 1.5 The Bidder is expected to read all instructions, forms, terms, and specifications in the Tendering Documents carefully and submit bid in accordance.. Failure to furnish all information or documentation required by the Tendering Documents may result in the rejection of the Tender considering that it is non responsive.

1.5.1. MINIMUM ELIGIBILITY CRITERIA (MEC)

- i) The **Average Annual Financial Turnover** during the last Three (3) years ending 31st March 2018 should be at least **INR Rs. 200.00 Lakhs**. Auditors report in original certified by CA, for the years 2015-16, 2016-17 & 2017-18 including relevant P/L a/c and balance sheet. However for Year 2017-2018, Provisional Certificate certified by Chartered Accountant shall be submitted.
- ii) The Tenderer should have experience in ‘Similar Works during last Seven (7) years ending last day of month previous to the one in which tenders invited should be either of the following:-
 - a) One similar completed work of contract value not less than **Rs. 533.00 Lakhs** each (OR)
 - b) Two similar completed works of contract value not less than **Rs. 400.00 Lakhs .** each (OR)
 - c) Three similar completed works of contract value not less than **Rs. 267.00 Lakhs** each.

“Similar works” means the works of “The works of paving of roads with asphalt/concrete/Paver Blocks or area development with Concrete/ Asphaltic/Paver Blocks”.

PI Note: 1. The Tenderers shall enclose the certified copy of a) Annual Financial Turnover for the year 2015-16, 2016-17 & 2017-18 (original copy certified by CA with P/L a/c and balance sheet), b) attested work order copies for similar works, c) successful completion certificates with satisfactory performance from clients indicating the date of completion, value of work done, etc.
2. The tenderer shall furnish all the details as per the clause No. 2.5 of the Instructions to Tenderer ITT). The Port will not obtain any further clarification after opening of the technical bid. Conditional and incomplete submission of tender liable to be treated as non-responsive and shall be rejected.

1.6 LAST DATE FOR SUBMISSION OF TENDER

The final date of submission is as indicated at the NIOT.

MPT may at its sole discretion reserves the right to extend the date for receipt of tender. Tenders received after the aforesaid time and date or the extended time and date, if any, shall be summarily rejected.

1.7. BIDDER TO INFORM HIMSELF FULLY

- a. The Bidder is expected to examine carefully the contents of the tender document like Instructions to the Bidders, General Conditions, Special Conditions, Scope of work, Technical Specification etc. Failure to comply with the requirements of the tender will be at the Bidder's own risk. It would be deemed prior to the submission of the tender that the Bidder has made a complete and careful examination of requirements and other information set out in the tender document including inspection of site.
- b. The Bidder is advised to get acquainted himself with the job involved at the site, like availability of labour, means of transport, communication facilities including access or other aspects laws and bye laws in force from Government of Goa and Govt. of India and any other Statutory bodies as well as MPT regulation for the issue of passes and collect all information that may be necessary for preparing and submitting the tender and entering into Contract with MPT.
- c. Bidder shall bear all costs associated with the preparation and submission of his tender and MPT will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tendering process.

1.8. EARNEST MONEY DEPOSIT (EMD)

- a. The Bidder shall furnish as part of its Tender, an EMD of **Rs. 6,67,000/-**, Tender without EMD shall be treated invalid. The E.M.D. shall be in the form of E-MODE ONLY as per NIT.
- b. In the event of Bidder withdrawing his tender before the expiry of tender validity period of **120 days** from the date of opening of technical bid, the tender submitted by the Bidder shall be cancelled and EMD shall be forfeited and will not be allowed to participate in future bidding for one year.

- c. The Earnest Money Deposit of unsuccessful Bidders shall be returned on award of Contract to the successful Bidder and submission of Performance Guarantee by him after Acceptance of the award. No interest shall be payable on the amount of E.M.D in any case.
- d. Small Scale Industries (SSI) / Micro. Small and Medium Enterprises(MSME) Registered with National Small Industries Corporation (NSIC) are exempted from payment of Earnest Money Deposit (EMD)/Bid Security while participating in Port Tenders .However they shall have to submit the relevant registration certificate till the bid validity period for the respective allotment.

1.9 Performance Guarantee (Security Deposit):

The successful bidder has to furnish 5% of the Contract value towards Performance Guarantee within **21 days** of issue of Work Order/ Purchase Order, in the form of **Demand Draft** or **Bank Guarantee from Nationalised / Scheduled Bank** having a branch in Goa, failing to furnish the Performance Guarantee within the prescribed time, the tender is liable to be terminated and entire amount of EMD will be forfeited . The Performance Guarantee shall be retained with the Port till the defect liability period plus claim period of **2 months**.

2.0 Retention Money :

Retention money will be recovered at the rate of 10% on the value of each running bills, limited to 5% of the contract value. Retention Money will be released on completion of defect liability period.

2.1 MPT'S RIGHT TO ANNUL THE BIDDING PROCESS

- a. Notwithstanding anything contained in this tender document, MPT reserves the right to annul the bidding process at any time without any liability or any obligation for such annulment, without assigning any reason.
- b. MPT reserves the right to invite revised Techno-commercial bids with or without amendment of the tender document at any stage, without liability or any obligation for such invitation and without assigning any reason.
- c. MPT reserves the right to reject any Tender if at any time, a material misrepresentation is made or uncovered OR the Bidder does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the tender.

2.2 TENDER VALIDITY

The tender shall remain valid for acceptance for a period of **120 days** from the date fixed for opening of Technical Bid. MPT reserves their right to extend the period of validity for a specific time. The request and the response, there to, shall be made in writing by post or by Fax/E-mail. However, in the event of the Bidder agreeing to the request, he shall not be permitted to modify his tender. In the event of the Bidder is agreeing to the extension, the Bidder shall correspondingly extend the validity of the tender suitably against this Tender. In case Bidders do not agree to extend the validity of their offer beyond the validity period, EMD of such Bidders shall be refunded after award of the contract.

2.3 AUTHORITY IN SIGNING TENDER DOCUMENTS

- The Price Bid to be submitted shall be signed by a person or persons duly authorized to sign on behalf of the Bidders.
- The tender, if submitted on behalf of principals or a Partnership Firm should be signed either by all the partners or some of the partners or other person/s holding a valid "Power of Attorney" from other partners or all the partners constituting the firm or the Principals as the case may be.
- In case of a Company, partnership firm, the tender should be signed by a person holding a valid Power of Attorney executed in his favour in accordance with the constitution of the Company.

2.4 AMENDMENTS

- a. At any time, prior to the last date for submission of tenders, MPT reserves the right to amend and modify the tender document. The amendments so carried out shall be uploaded on the website and also forwarded to the Bidders who had participated in the pre-bid meeting.
- b. The amendment so carried out shall form part of the tender and shall be binding upon the Bidders. MPT may at their discretion, extend the last date for submission of the tender, to enable the Bidders to have reasonable time to submit their tender after taking into consideration such amendments.

2.5 TEST OF RESPONSIVENESS

i) Prior to evaluation of Applications, the Authority shall determine whether each

Application is responsive to the requirements of the tender. A tender shall be considered responsive only if:

a. It is received by the Tender Due date including any extension thereof;

b. Tender cost of **Rs. 5000/-** and the Earnest Money Deposit (EMD) of **Rs. 6,67,000/-** has been remitted through e-payment or as indicated at the NIOT.

c. The Auditor's report for the last three years endorsed by Chartered Accountant shall be submitted in original for the year **2015-16, 2016-17 and 2017-18** as per **Appendix -IV**, along with relevant profit and loss statements and balance sheets.

d. Copies of completion certificate of similar works indicating the value of completed works.

e. The Power of Attorney, to be furnished .in relevant format

f. The tender document along with all the forms to be filled and submitted online with sign and seal.

g. Vendor Registration Form indicating the bank details like name of bank, bank branch, type of account, bank Account no., MICR code, etc as per **Appendix -XI**

ii) The bidder should possess a valid GSTIN, PAN, GST EPF registration and ESI registration number.

iii) The Bidder shall give a Declaration that the Bidder is not black listed by any Government or Non-Government Organization as per **Appendix - IX**.

The Tender fee and EMD shall be furnished as indicated in the NIOT. Upon confirmation of receipt of the same the Techno-commercial bid (Cover-I) shall be opened on the date indicated at the NIOT. The Price-bid of only those Bidders shall be opened whose Tender is found to be responsive. The date of opening of price bid shall be notified after scrutiny and evaluation of Techno-commercial Bid.

2.6 ERRORS IN THE TENDER DOCUMENT

- a. Provided that a Tender is substantially responsive, the Port may waive any non-conformities or omissions in the Tender that do not constitute a material deviation.
- b. Bidders are advised to submit full and complete information / documents as specified in the Tender Document with regard to Tender requirement. Employers at their discretion may decide not to seek any clarification of bid document. In the event of non-availability of required information / documents essential to qualify for the bid, bidders will be solely responsible for their disqualification.

2.7 OTHER EXPENSES

All costs charges and expenses including any duty in connection with the Contract as well as preparations and completions of Agreement by MPT's attorneys shall be borne and payable by the Bidder. Bidder shall ascertain the taxes and duties to be paid on his own before the submission of the bid. All taxes & duties, to be paid to Govt. of India, Govt. of Goa or any statutory bodies shall be paid by the Contractor for stamp duty. The taxes prevailing during tendering and execution of the work shall be applicable.

2.8 CONTRACT WORKS AND CONTRACT PRICE

- a. The work to be carried out (herein after referred to as "the Contract Works") and the Price for the same (herein after called "the Contract Price") shall include the work described in the specifications, schedules, drawings, etc. annexed hereto.
- b. Except where otherwise expressly provided, the Contractor shall provide all materials, labour and Plant and things necessary in connection with the Contract work although everything may not be fully specified and although there may be errors and omissions in the specifications.

c. SCHEDULE OF PRICE

The Schedule of price /BOQ shall be read in conjunction with all other sections of bidding document. **This is a percentage rate tender.**

The price offered should be firm and inclusive of all taxes & duties except GST which will be paid extra as applicable. However, if any new tax will be imposed by State/Central Govt. the same will be reimbursed on producing documentary proof.

Note : The bidder shall quote the price exclusive of GST. Applicable GST shall be paid on the quoted price.

- d. Bidder shall quote for the work after careful analysis of cost involved for the performance of the works as per Scope of Work, Scope of Supply, Specifications, Standards, Drawings, General Conditions of Contract and Special Condition of Contract.
- e. The Price shall include all expenditure incurred towards mobilization and demobilization.
- f. Price shall be quoted in Indian Rupees only.

2.9 LANGUAGE OF TENDER

The Tender submitted by the Bidder and all correspondence and documents relating to the Tender exchanged by the Bidder and MPT shall be written in the English language.

3.0 CLARIFICATION

If there are any queries/clarifications, the same shall be got clarified two days before the due date of submission.

3.1 TENDER OPENING, SCRUTINY AND EVALUATION OF TECHNICAL BID

Tender that is substantially responsive is that which conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one (1) which affects in any substantial way, the scope, quality, or performance of the Bidder, or (2) which limits in any substantial way, inconsistent with the Tender document, or (3) whose rectification would affect unfairly the competitive position of other Qualified Applicant presenting substantially responsive bids

Since the tender involves selection based on Minimum eligibility criteria, test of responsiveness and technical specification, the Chief Engineer will examine and seek clarification if any and list out the firms, which are found responsive and BOQ of such tenders only will be opened and EMD will be returned to the unresponsive Bidders..

The date and time will be intimated to Bidders whose offers are found suitable and BOQ of such Bidders will be opened.

After the tender opening, the whole process involving scrutiny, clarifications, evaluation and comparison of tenders and recommendations regarding award of Contract shall be confidential. Any efforts on part of any Bidder to influence the Port

Trust in any way in the process of scrutiny, evaluation, comparison of tenders and decision concerning award of Contract may result in rejection of the Bidders bid.

To assess the scrutiny, evaluation and comparison of tenders, the Port Trust may ask Bidder individually for clarifications. Request for clarification and response thereto, shall be in writing or through e mail followed by post or through speed post. No change in Price or substance of the tender shall be sought, offered or permitted nor is the Bidder permitted to withdraw the tender before the expiry of the validity period of the tenders in the process of clarifications.

3.2 EVALUATION OF PRICE BID

- a. The price offered should be firm and inclusive of all taxes & duties except GST which will be paid extra as applicable. This is a percentage rate tender.
- b. MPT will evaluate and compare only those bids, which are substantially responsive.
- c. **The price quoted by the Bidder exclusive of GST shall be considered for the purpose of evaluation and comparison.**
- d. In arriving at the final evaluated prices of the bidders, evaluation of offer will be based on the lowest price quoted.

3.3. MPT'S RIGHT TO ACCEPT OR REJECT A BID

MPT reserves the right to accept a Bid other than the lowest and to accept or reject any Bid in whole or part, to annul the bidding process or to reject all Bids with or without notice or reasons. Such decisions by MPT shall bear no liability whatsoever consequent upon such decisions.

3.4 AWARD OF CONTRACT

The Bidder, whose Bid is accepted by MPT shall be issued Letter of Acceptance (LOA) prior to expiry of Bid validity. Bidder shall confirm acceptance by returning a signed copy of the LOA. MPT shall not be obliged to furnish any information/clarification/explanation to the Contractors as regards non-acceptance of their Bid.

**CHIEF ENGINEER
MORMUGAO PORT TRUST**

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 36/2018

Name of Work: “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”

JOINT VENTURE

- 1 The number of members in the Joint Venture (JV) shall be restricted to two.
- 2 Lead member of the JV shall have equity share of minimum 51% and maximum 74%. Lead member shall satisfy Financial and Technical criteria specified in the tender.
- 3 All the members of the joint venture shall be, jointly raise the finance whenever required and jointly responsible for the liability, during the bidding process and for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization or memorandum of understanding or joint venture Agreement. The bid shall be signed so as to legally bind all the members, jointly or severally.
- 4 Bids submitted by a joint venture (JV) shall comply with the following requirements:
 - a) A copy of the Joint Venture Agreement (JVA) entered into by the partners shall be submitted with the bid. JVA shall include among other things, the
Joint Venture’s objectives, the proposed management structure, the contribution of each partner to the Joint Venture operation, the commitment of the partners to joint and several liability for due performance, recourse / sanctions within the Joint Venture in the event of default or withdrawal of any partner and arrangements for providing the required indemnities.
 - b) The most experienced partner will be the Lead Partner and nominated as the partner- in-charge; in pursuance to Clause 2 and this authorisation shall be evidenced by submitting a power of attorney signed by the legally authorised signatories of all the partners. The most experienced partner/Lead Partner will be the one defined as such in the communication approved the pre-qualification.
 - c) The most experienced partner/Lead Partner of the joint venture will provide suitable experienced personnel at site for the purpose of general planning, site management and plant operations, during the whole period of contract execution and a statement to this effect should be included in the Joint Venture Agreement.

- d) The bid, and in the case of the successful bidder, the Form of Agreement shall be signed and / or executed in such a manner as may be required for making

it legally binding on all partners (including operative parts of the ensuing Contract in respect of Arbitration Agreement etc.)

- e) The partner-in-charge shall be authorised to incur liabilities and to receive instructions for and on behalf of all partners of the Joint Venture and the entire execution of the Contract including payment shall be carried out exclusively through the partner-in-charge. A statement to this effect should be included in the joint venture agreement.
- f) All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the joint venture agreement.
- g) Bid Security (EMD) as required can be furnished by any partner but it should be in the name of joint venture.
- h) Performance guarantee, as required, will be furnished by all partner(s), out of their accounts, in proportion to their participation in Joint Venture.
- i) Joint Venture Agreement shall contain a clause to the effect that there shall be a separate JV Bank Account (distinct from the Bank Accounts of the individual partners) to which the individual partner shall contribute their share capital and / or working capital.
- j) Joint Venture Agreement shall also contain a clause to the effect that the financial obligations of the JV shall be discharged through the said JV Bank Account only and also all the payments received by the JV from the Employer shall be through that account alone.
- k) In the event of default by the most experienced partner (lead Partner), it shall be construed as default of the Contractor; and Employer will take action under Conditions of Contract.
- l) In the event of any other partner leaving the JV, it shall be intimated to the Employer within 30 days by the other partner(s). Failure to do so shall be construed as default of the Contractor and the Employer may take action under the Conditions of Contract.
- m) In case the joint venture agreement is not acceptable to the Employer, the joint venture will modify the agreement so as to be acceptable to the Employer.
- n) The bid submitted shall include all the information as per the PROFORMA in the bid document and furnished separately for each partner.

- o) In case of withdrawal of any partner from the JV the following shall be applicable:
 - i) Stepping into the shoes of the existing partners of JV with all the liabilities of the existing partners from the beginning of the Contract;
 - ii) With the prior approval of the Employer;
- iii) Notwithstanding demarcation or allotment of work between two JV partners, JV shall be liable for non-performance of the whole contract irrespective of their demarcation or share of work; and
- iv) The payments under the contract will only be made to the JV and not to the individual partners.

**CHIEF ENGINEER
MORMUGAO PORT TRUST**

JOINT VENTURE PARTNER INFORMATION FORM
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[The Tenderer shall fill in this Form in accordance with the instructions indicated below].

Date: insert date (as day, month and year) of Tender Submission]. Tender No.: [insert number of Tendering process]

1. Tenderer's Legal Name: [insert <i>Tenderer's legal name</i>]
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2. JV's Party Legal name: [<i>insert JV's Party legal name</i>]

3. JV's Party Country of Registration: [<i>insert JV's Party country of registration and details of registration</i>]

4. JV's Party Year of Registration: <i>Insert JV's Party year of registration</i>

5. JV's Party Legal Address in Country/ of Registration: [<i>insert JV's Party legal address in country of registration</i>]
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JV's Party Authorized Representative Information

Name: [insert name of JV's Party authorized representative]

6 Address: [insert address of JV's Party authorized representative]

Telephone/Fax numbers: [insert telephone/fax numbers of JV's Party authorized representative]

Attached are copies of original documents of: [*check the box(es) of the attached original documents*]

- Articles of Incorporation or Registration of firm named in 2, above, in accordance with Tender Document
- In case of government owned entity from India, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with Tender Document
- PAN Number
- GST registration Number
- Service Tax Registration Number
- Any other documents required for statutory compliance

Duly authorized to sign this Authorization on behalf of : [*Insert complete name of Tenderer*]

Dated on _____ day of _____, _____ [*insert date of signing*]

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT
e-TENDER No. CE/36 /2018

**Name of Work: Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line
No. 8.”**

SCOPE OF WORK

1. Excavation in dense or hard soil/murum/interspersed with boulder etc.
2. Earth Filling with murum or other approved earth brought from outside.
3. Earth filling with available earth at site.
4. Providing and laying laterite rubble Soling for drains only, 15cm thick.
5. Providing and laying Granular sub-base of total thickness of 25 cm in two layers.
6. Providing and laying Wet Mix Macadam, 15cm thick.
7. Providing and laying Dry Lean Concrete of 7.5cm thick.
8. Providing and laying M50 grade interlocking concrete paving blocks,100 mm thick
9. Providing and laying Plain cement concrete M15 grade with RMC for drain/trench.
10. Providing and laying M25 Grade concrete with RMC, for RCC drains & Cable Trenches
11. Providing and fixing shuttering for drains & Cable Trenches.
12. Providing and fixing reinforcement in drains & Cable Trenches with Fe 500 tor steel.
13. Providing and placing in position Precast Factory made RCC Drain cover slabs
60x45x20 cm size with reinforcement.
14. Demolishing and clearing of Plain cement concrete and Reinforced Cement concrete
including cutting of reinforcement steel.
15. Hiring charges of Backhoe excavator with breaker attachment.
16. Hiring charges of Tipper Truck of 6 M3 capacity.
17. Hiring charges of Vibratory Road Roller, 80-100 KN static weight.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36 /2018

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

GENERAL CONDITIONS AND TECHNICAL SPECIFICATIONS

SECTION - I

GENERAL CONDITIONS

1. Figured dimensions on drawings shall supersede measurements by scale and drawings to a large scale shall take precedence over those to a smaller scale. Special dimensions or directions in the specifications shall supersede all else.
2. Before the commencement of the work, accurate surveys and levels of the ground proposed to be excavated or filled up shall be taken by the Contractor or his agent along with the Chief Engineer's representative using Total Station and leveling Instruments and recorded in the level book, which shall be signed by the Contractor and the Chief Engineer's representative. The quantities obtained from these recorded levels shall be final and binding upon both the contracting parties but subject to the Engineer's power to vary the works as and when found necessary.
3. One permanent benchmark and two baselines (N-S & E-W) shall be provided at site, from where the survey lines and levels are to be extended by the Contractor. The Contractor shall provide and carryout all survey work as required for laying out the premises properly and carryout the work throughout to true lines and levels as indicated in drawing and specification. All survey works to be done for above works shall be deemed to be included in rates for respective items of civil works. The Contractor shall provide his own measuring / surveying equipment for setting out, leveling and aligning work at his own expense. He will also provide all necessary equipment / help the Purchaser to check the said work.
4. The Contractor shall provide suitable flat tops and build the same in cement concrete or brick masonry for temporary bench marks. All the pegs and sight rails for setting out the work and fixing the necessary levels required for the execution thereof shall be built in brick masonry at such places and in such manner as directed by the Engineer's representative.
5. The layout and levels of all structures, etc. shall be made by the Contractor at his own cost from the general grid of the plot and bench mark given by the Engineer in charge. He shall provide all instrument, materials and men to the Engineer in charge for checking the layout and levels. However, the Contractor shall be fully responsible for correctness of layout and levels.
6. The whole of the materials used on the work should be of the best quality of their respective kinds as specified or described and all the materials to be used in and about every part of the work may from time to time be subjected to tests by means of such machines, instruments and appliances as the Engineer's representative may direct. Samples whether submitted to govern bulk supplies or required for testing before use and suitable packages to contain them, shall be provided free of charge by the Contractor. Testing charges for tests ordered by the Engineer's representative shall be borne by the contractor. All other expenditure required to be incurred for taking samples, conveyance, packaging etc. shall be borne by the Contractor.

7. The work to be performed under this specification consists of providing all labour, materials, construction equipment, tools and plant, scaffolding, supplies, transportation, all incidental items not shown or specified, but reasonably implied or necessary for successful completion of the work including Contractor's supervision and in strict accordance with the drawings and I.S specifications. The nature of work shall generally involve earthwork in excavation, formation of road/pavement embankment by providing soling, water bound macadam, backfilling around completed structures, disposal of surplus excavated materials, RCC works for drains etc.
8. The drawings included in the Bidding Document provide a general idea about the work to be performed under the scope of this contract. These are preliminary drawings for bidding purposes only and are by no means the final drawings or show the full range of the work under the scope. Work has to be executed according to drawings issued for construction.
9. Contractor shall mobilise all necessary equipment such as excavator, tandem vibratory rollers of 80-100 KN static weight, concrete mixers, weigh batchers, Bulldozers, Hot mix mixer, trucks, tractors etc. for efficient and speedy execution of works. Any machinery found to be unsuitable/malfunctioning in the opinion of the Port shall be removed from the site and replaced. The Contractor shall provide necessary vehicles at site for quick mobilization of his staff, workers, materials, etc
10. The contractor shall appoint at site, minimum **One (1) number** experienced graduate Civil Engineer (B.E./Diploma in Civil Engineering with minimum 5 years of experience in "similar works" as mentioned in the tender as site-in charge and for quality control and supervision, two supervisors having knowledge of Microsoft software and Autocad Software) on all working days at site to take necessary instructions from the Port for execution of works during the , failing which the **contract is liable for termination**. The Contractor, shall also appoint minimum **one (1) number Surveyor** (having experience in usage of **Total Station** surveying equipment and **Leveling instruments** at site alongwith Surveying tools and supporting staffs on all days at site, falling which the **contract is liable for termination**.
11. The Tenderer shall inspect the site, examine and obtain all information required and satisfy himself regarding matters such as access to site, communications, transport, right of way, equipment and facilities required for the work, availability of local labour, materials and their rates, local working conditions, weather, natural drainage, water table etc. Ignorance of the site conditions shall not be accepted by the client as basis for any claim for compensation or extension of time.
12. The Contractor shall obtain necessary Harbour entry **Gate Pass** (RFID) online for staff's, workers and vehicles. Manual passes for entry/ exit of materials, tools, plants, machineries, instruments, construction materials, etc. required for the work, well in advance (with minimum **two (2) days** in advance of Port holidays and Sundays). The contractor shall obtain the passes from the Port through online system. The Harbour Entry Gate Passes for vehicles, labours, staff's and material passes shall be free of cost. Contractor shall print gate pass booklet for material entry as per MPT format at Contractor's cost. Any delay caused in receipt of passes due to any reason what so ever shall not be construed as valid reason for granting extension of work completion period.

13. Before commencement of the work and within **Ten (10) days** on receipt of Work Order (Purchase Order) from the Port, the contractor shall submit to the Chief Engineer, **a bar chart** for the work, indicating the duration of various activities of work along with details of machineries, instruments ,and number of workers, staff schedule to be deployed for the work.
14. The Chief Engineer may during progress of work, order the removal of part / whole of such work already executed, which is found not to be in accordance with drawings, specifications and instructions of the Purchaser. No extra claim shall be entertained for re-executing or altering of such works. Similarly the Contractor immediately at his own expense shall remove any materials brought to site and rejected by the Chief Engineer or his representative from the site.
15. The contractor along with his Civil Engineer shall be present for the weekly/monthly meeting at 09.30 hrs. in the Chief Engineers cabin or at any office/Site and time as directed by the Port with BarChart, Tender, drawings, test reports, samples, etc. to review the progress/ discrepancies in the work, failing which the contract is liable for termination.
16. If due to design or other stipulations in the Contract or requirements at site a particular sequence of overall construction has to be followed due to which certain interruptions to any one or more items of work are inherent, no claims for such interruptions will be admissible.
14. All handling and transport charges of raw materials and fabricated structures including double handling as required for completion of the work in accordance with time schedule are deemed to be included in the quoted rates.
15. Should the Contractor wish to deviate from any specifications or details shown on the approved drawings and / or Technical specifications, he shall obtain from the Chief Engineer written approval before carrying out such deviations.
16. The Contractor shall follow all safety norms throughout the period of work. Provisions of Bureau of Indian Standards and other sound engineering practices shall be followed for the same.
17. The Contractor shall take all the precautions for rain, storm etc. and no liability shall rest with the Chief Engineer for any loss on cost of re-erection, rectification etc. due to these factors.
18. The Contractor **shall not remove** any material or equipment brought by him from construction site without written permission from the **Chief Engineer**.
19. In the event of any discrepancies between drawings and specifications, it may be noted that drawings shall supersede the specifications. Similarly in case of any discrepancies between description in specification or drawings and schedule of items, the provision in schedule of item shall prevail.
20. **Dimensions**

Figured dimensions shall prevail in preference to scaled dimension. In case of discrepancy between dimensions, the contractor shall obtain clearance from Chief Engineer or his authorised representative engineer before proceeding with work.

21. Sequence of work

Contractor shall plan and sequence all works so as to achieve the desired progress keeping in mind overall safety and stability at all point of time. If due to particular design or specification or availability of machines or any other reason, a particular sequence of operation is demanded by the Engineer due to which some interruption to any one or more types of work or items of execution are inherent, then no claim for such interruption shall be entertained and contractor shall have to follow the sequence as instructed by the Engineer.

22. Damages

Any existing services or other properties if damaged or demolished during the course of execution either willfully or negligently, shall be repaired or re-erected by the Contractor. The Contractor will take all precautions against damages due to rain and storm and no liability shall rest with the Chief Engineer for any loss for redoing of any work due to this account. Existing underground services coming in the way of trench or foundation excavation etc. have to be adequately supported by the Contractor at his own cost so as to avoid any damage to those services. In case of any accidental damage, the Contractor shall arrange to rectify and reinstall those services immediately.

23 APPROVAL AND TESTS

- 23.1 A high standard of quality is required for all materials and workmanship in construction work. They shall be best of the kind obtainable indigenously in each case and shall be procured from manufacturers of repute in order to ensure uniformity of quality and timely supply.
- 23.2 All materials shall be subjected to inspection and testing. The Contractor shall submit samples for testing as may be required by the Engineer. Sampling and testing shall be carried out in accordance with relevant IS/IRC Standards.
- 23.3 All specimens and approved samples shall be maintained by the Contractor under safe custody. The Contractor shall make arrangements for proper storage of the same.
- 23.4 Wherever IS/IRC codes are referred; they shall be latest edition/ publication as on date irrespective of the date of finalisation of the work.

24 SITE REGISTERS

- 24.1 The contractor shall maintain and update all records of labour employed for this work and product h same o the Controlling Officer regularly and any other Competent Authority as and when required.

The following minimum records shall be maintained:

- i) Muster roll.
- ii) Register of Wages.
- iii) Material Register (stating total received, consumption and balance)
- iv) Site Instruction Book
- v) Joint Record/Measurement Register
- vi) Any other records to be maintained under various acts as applicable and as instructed by Chief Engineer or his representative. The contractor shall keep all registers in safe custody.

24.2 The Contractor shall establish and maintain at his own cost in full working condition a well equipped laboratory at site duly calibrated for the testing of all materials to be used in the work. The laboratory shall be accommodated in a secured, independent, temporary structure and shall be equipped with amongst other. Or the contractor shall tie up with the government approved laboratory for testing of materials.

The contractor shall maintain proper registers and records of all tests carried out . All tests shall be carried out as per the relevant norms and standards laid down for the testing of the material by MORTH (latest edition) / the latest IS code of practice applicable therein. The laboratory equipment should be periodically calibrated by the Contractor at his cost as required by the Chief Engineer or his representative will get the needful done at the risk and cost of the Contractor and recover the amount spent from the contractor's bill.

25 REJECTION OF MATERIALS

- 25.1 Any material brought to site which, in the opinion of the Chief Engineer or his representative is damaged, contaminated, deteriorated or does not comply with the requirement of this specification shall be rejected.
- 25.2 If the routine tests or random site tests show that any of the materials, brought to site, do not comply in any way with the requirements of this specification or of IS/IRC codes as applicable, then that material shall be rejected.
- 25.3 The Contractor at his own cost shall remove from site any and all such rejected material within the time specified by the Client.

SECTION II

TECHNICAL SPECIFICATIONS

1. EARTHWORK , EXCAVATION, FILLING AND SITE CLEARANCE

1.1 Removing and disposing of all materials bushes, shrubs, stumps, roots, grass weeds, top soil, rubbish etc., which in the opinion of Engineer is unsuitable for incorporation in the work including draining out stagnant water if any from the area of road land, drain, and other areas, as specified in the drawing by Engineer. It shall include necessary surface dressing using dozer or any other suitable equipment, back filling of the pits, by suitable soil, resulting from uprooting of trees & stumps and making the surface in proper grade by suitable equipment and compacted by power roller to required compaction. The work also includes handling salvaging and disposal of cleared material. Clearing and grubbing shall be performed in advance of earthwork operation and in accordance with requirement of this specification. Areas requiring clearing and grubbing shall be determined by the Engineer. Removal of stumps and roots, and trimming of branches of trees extending above the roadway shall be considered incidental and included in the work. The rate quoted shall include clearing from site removal of unserviceable materials and by transporting the unserviceable material as directed. Removal of excavated materials includes separation of useful materials from the useless materials as decided by the Engineer or his representative. Removal of stumps left over after trees have been cut by any other agency, earth stacked by other agencies, shall also be included in the item of work. The work includes disposal of all the debris thus collected, loading on to tippers, trucks and transportation to dumping site within a lead of **7.00 km** as directed by the Engineer. Work also includes rough leveling of the area with dozer and rolling with tandem vibratory road rollers of 80-100 KN weight to achieve a compacted earth fill though out the dump site.

1.2 The Contractor shall make his own surveying arrangements for locating the coordinates and positions of all work and establishing the reduced levels (RL's) at these locations based on reference grid lines and bench mark. The Contractor has to provide at site all the required survey instruments, along with qualified surveyors, to the satisfaction of the Engineer so that the work can be carried out accurately and according to the specification and drawings.

1.3 Excavation shall be done to the required level as indicated in the working drawing or to the depth indicated by the Chief Engineer or his authorised representative. Every time excavation is ready to the required dimension, the contractor shall intimate the Chief Engineer or his authorised representative for approval and for taking measurements. The quantity for excavation will be measured as a rectangle and any extra work due to the site slip etc. will not be paid. In case of excess depth of excavation below the required level, the additional depth shall be made good by the contractor with basalt stone duly compacted at his own cost.

1.4 Excavated earth from the foundations shall generally be used for filling unless it is found unsuitable for the purpose by the Chief Engineer's representative. In such cases, the contractor shall stack the excavated material within a lead of **7 kms**, neatly without any extra charges, unless otherwise specified in the schedule.

1.5 The Contractor shall remove all materials arising from excavations from the vicinity of the work either for direct filling, stacking for subsequent filling or for ultimate disposal (within & outside the plant area) as directed by the Engineer in charge. Material to be used for filling shall be kept separately.

All these works have to be carried out as per the relevant BOQ item. Before start of excavation work, joint measurements of ground level shall be taken after clearing all grass, vegetation etc.

2. Measurements for Payment

2.1 Excavation shall be measured by taking cross sections at suitable intervals in the original position before the work starts and after its completion and computing the volumes in cubic metre by the method of average end areas for each class of material encountered. Where it is not feasible to compute volumes by this method because of erratic location of isolated deposits, the volume should be computed by other accepted methods.

2.2 At the option of the Engineer, the contractor shall leave depth indicators during excavations of such shape and size and in such positions as directed so as to indicate the original ground level as accurately as possible. The contractor shall see that these remain intact till the final measurements are taken.

3. Granular Sub Base

3.1 The work and testing of materials etc. shall be carried out as per Section 401 & all its sub sections , of "Specifications for Road and Bridge Works, of MORTH , published by IRC (latest edition).

4. Wet Mix Macadam

4.1 The work and testing of materials etc. shall be carried out as per Section 406 & all its sub sections , of "Specifications for Road and Bridge Works, of MORTH , published by IRC (latest edition).

5.0 Dry Lean Concrete

5.1 The work and testing of materials etc. shall be carried out as per Section 601 & all its sub sections , of "Specifications for Road and Bridge Works, of MORTH , published by IRC (latest edition).

6 R.C.C WORKS

6.1 MATERIALS

6.1.1 General: All the materials used in the manufacture of concrete shall be in accordance With the Technical Specification for Properties, Storage and Handling etc, Which shall be deemed to form a part of this specification.

6.1.2 The Engineer shall have the right to inspect the sources of materials, the layout and operation of procurement and storage of materials, the concrete batching and mixing equipments and the quality control system. Such an inspection shall be arranged by the contractor and the Engineer approval shall be obtained prior to starting of the work.

6.2 Aggregates : Aggregate in general designates both fine and coarse inert materials used in the manufacture of concrete. Coarse Aggregate is fraction retained on 4.75 mm IS sieve. Fine Aggregate is fraction which passes through 4.75 mm IS sieve.

6.2.1 Aggregate shall consist of naturally occurring river sand, crushed stone and gravel from a source known to produce satisfactory aggregate for concrete and shall be chemically inert, strong, hard, durable against weathering, of limited porosity and free from deleterious materials that may cause corrosion to

the reinforcement or may impair the strength and / or durability of concrete. Aggregates shall conform to I.S. 383

6.2.2 Properties: Aggregates with a specific gravity below 2.6 shall not be used without special permission of the Chief Engineer.

6.2.3 The coarse aggregate and fine aggregate shall be tested from time to time as required by the Engineer to ascertain its suitability for use in construction and the charges for testing aggregate shall be born by the contractor as specified herein after. Sampling of the aggregates for mix design and determination of suitability shall be taken under the supervision of the Engineer and delivered to the laboratory, well in advance of the schedule placing of concrete. Records of tests which have been made on proposed aggregates and on concrete made from this source of aggregates shall be furnished to the Engineer in advance of the work for use, in determining suitability of the proposed aggregate.

6.2.4 The grading of aggregates shall be such as to produce a dense concrete of specified strength and consistency that will work readily into position without segregation and shall be based on the "mix design" and preliminary test on concrete specified herein-after.

6.3 Grading of Coarse Aggregate: Coarse aggregates shall be either in single or graded, in both the cases. The grading shall be within the following limits.

IS Sieve Designation	Percentage passing for single sized aggregates of nominal size						Percentage passing for graded aggregates of nominal size			
	63 mm	40 mm	20 mm	16 mm	12.5 mm	10 mm	40mm	20 mm	16 mm	12.5 mm
75mm	100	-	-	-	-	-	-	-	-	-
63mm	85-100	100	-	-	-	-	100	-	-	-
37.5mm	0-30	85-100	100	-	-	-	95-100	100	-	-
19mm	0-5	0-20	85-100	100	-	-	30-70	95-100	100	100
16mm	-	-	-	85-100	100	-	-	-	90-100	-
11.2mm	-	-	-	-	85-100	100	-	-	-	90-100
9.5mm	-	0-5	0-20	0-30	0-45	85-100	10-35	25-55	30-70	40-85
4.75mm	-	0-5	0-5	0-10	0-20	0-20	0-5	0-10	0-10	0-10
2.36mm	-	-	-	-	0-5	0-5	-	-	-	-

6.4 Grading of fine aggregate shall be within the limits indicated hereunder:

IS Sieve Designation	Percentage Passing for			
	GradingZone-I	GradingZone-II	GradingZone-III	GradingZone-IV
10 mm	100	100	100	100
4.75 mm	90-100	90-100	90-100	95-100
2.36 mm	60-95	75-100	85-100	95-100
1.18 mm	30-70	55-90	75-100	90-100
600 micron	15-34	35-59	60-79	80-100
300 micron	5-20	8-30	8-30	20-65
150 micron	0-10	0-10	0-10	0-15

6.5 Fineness Modulus: The fine aggregate shall have a fineness modulus of not less than 2.2 or more than 3.2. The fineness modulus is determined by adding the cumulative percentages retained on the following I.S. sieve sizes (4.75 mm, 2.36 mm, 1.18 mm, 600 micron, 300 micron and 150 micron) and dividing the sum by 100.

6.6 Storage of aggregates: All coarse and fine aggregates shall be stacked separately in stock piles in the material yard near the work site in bins properly constructed to avoid inter mixing of different aggregates. Contamination with foreign materials and earth during storage and while heaping the materials shall be avoided. The aggregate must be of specified quality not only at the time of receiving at site but also at the time of loading into mixer. Rakers shall be used for lifting the coarse aggregate from bins or stock piles. Coarse aggregate shall be piled in layers not exceeding 1.00 metres in height to prevent conning or segregation. Each layer shall cover the entire area of the stock pile before succeeding layers are started. Aggregates that have become segregated shall be rejected. Rejected material after remixing may be accepted, if subsequent tests demonstrate conformity with required gradation.

6.7 CEMENT: Slag cement shall be used for all type of civil works below finished floor level.

6.7.1 Cement unless otherwise specified or called for by the Chief Engineer or his authorized representative shall be measured **in 50 kg bags**. Use of bulk cement will be permitted only with the approval of the Chief Engineer. Changing of brands of type of cement within the same structure will not be permitted. Joint account of cement consumed at site for every day for items of work carried shall be maintained by the Contractor for verification to ensure effective control on quality of work.

6.7.2 A certified report attesting the conformity of the cement to IS: specifications by the cement manufacturer's chemist shall be furnished to the Consultant, if demanded. Should at any time the Engineer have reasons to consider that any cement is defective, then irrespective of its origin and / or manufacturers test certificate, such cement shall be tested immediately at a National Test Laboratory /

Departmental Laboratory or such approved laboratory, and until the results of such tests are found satisfactory, it shall not be used in any work. Cement held in store for a period of ninety **(90) days** or longer shall be retested before use in work.

6.7.3 The contractor shall make his own arrangements for the storage of adequate quantity of cement. If supplies are arranged by the Department, cement will be issued in quantities to cover work requirements of one month or more, as deemed fit by the Engineer and it will be the responsibility of the contractor to ensure adequate and proper storage, which will provide complete protection from dampness, contamination and minimize caking and false set.

6.7.4 Cement bags shall be stored in a dry enclosed shed (storage under tarpaulins will not be permitted), well away from the outer walls and insulated from the floor to avoid contact with moisture from ground and so arranged as to provide ready access. Damaged or reclaimed or partly set cement will not be permitted to be used and shall be removed from the site. The storage arrangements shall be such that there is no dead storage. No more than 12 bags shall be stacked in any tier. The storage arrangement shall be got approved by the Chief Engineer. Consignments in cement shall be stored as received and shall be consumed in the order of their delivery.

6.7.5 Cement used shall be of standard manufacturers like **ACC, Vasavadatta, Zuari, JK, ULTRATECH, BIRLA,L&T, JSW**. In case the same is not available in the market or incase of a change in trade name, equivalent makes / re-designated manufacturer shall be used with the approval of **Chief Engineer**.

6.8 REINFORCEMENT

6.8.1 Steel reinforcement bars for concrete shall be High Corrosion Resistant **Fe500 Torsteel bars** with strength requirements conforming to IS 1786 manufactured by **SAIL, TATA, JINDAL or RNIL**. The grade of steel shall be as shown in the drawings, or as mentioned in the schedule of items or as directed by Engineer.

6.8.2 Storage: Steel reinforcement shall be stored in such a manner that they are not in direct contact with ground but stacked on top of an arrangement of timbers sleepers or the like. Bars of different classifications and sizes shall be stored separately. In cases of long storage or in coastal areas, reinforcement shall be stacked above ground level by at least 15 cm, and a coat of cement wash shall be given to prevent scaling and rusting at no extra cost to the owner. Fabricated reinforcement shall be carefully stored to prevent, distortion, corrosion and deteriorations.

6.8.3 Contractor shall submit the manufacturers test certificate for steel. Random tests on steel supplied by contractor may be performed if the Engineer so desires as per relevant Indian Standards. All costs incidental to such tests shall be at contractor's expense. Steel not conforming to specifications shall be rejected.

6.9 WATER :

6.9.1 Water used for mixing and curing shall be clean and free from injurious amounts of oils, acids, alkalis, sugar, organic materials or other substances that may be deleterious to concrete or steel. Potable water is generally considered satisfactory for mixing concrete.

6.9.2 Average 28 days compressive strength of atleast three 150 mm concrete cubes prepared with water proposed to be used shall not be less than 90% of the average strength of three similar concrete

cubes -prepared with distilled water. The cubes shall be prepared, cured and tested in accordance with IS: 456.

6.9.3 The initial setting time of a concrete test block made with the appropriate cement and the water proposed to be used shall not be less than 30 minutes and shall not differ by + 30 minutes from the initial setting time of control test block prepared with the same cement and distilled water. The test shall be carried out as per IS: 4031.

6.10 ADMIXTURES

6.10.1 Admixtures in concrete for promoting workability, entraining air for similar purposes may be used only after the written permission from the Engineer is obtained. These shall be free from injurious amount of chloride, etc. Addition of admixtures should not reduce the specified strength or durability of concrete and should not have detrimental effect on reinforcement. The admixtures shall conform to IS: 9103 and shall be of proven make and from a reputed manufacturer. Calcium chloride as accelerating admixture is not permitted to be used other than in mass concrete works. The Contractor shall produce latest test results carried out at approved Government Test Houses for the approval of the Engineer, before use.

6.12 GRADES OF CONCRETE

6.12.1 Concrete shall be in grades as tabulated below:

Grade Designation	Specified Characteristic compressive strength at 28 days (N/mm ²)
M10	10
M15	15
M20	20
M25	25
M30	30
M35	35
M40	40

6.12.2 The characteristic strength is defined as the strength of material below which not more than 5% of the tests results are expected to fall.

6.12.3 In the designation of a concrete mix, latter M refers to the mix and the number to the specified characteristic compressive strength of 15 cm cubes at 28 days.

6.12.4 Minimum grades of concrete to be followed shall be as per guidelines of Table 5 of IS: 456 unless otherwise mentioned in the drawings / schedule of items. Concrete leaner than those given above may be used for lean concrete, mud mat, or for foundations of masonry walls.

6.12.5 Concrete mix proportioning

Concrete mix proportions shall be selected based on the requirements of workability, strength, and durability. The proportions of cement, aggregates and water shall be determined by designing the mix. Design mix concrete is designated as M20, M25, etc. The proportions referred to is by weight (mass) and not by volume. Use of volumetric mix concrete shall not be permitted.

6.13 Workability of concrete

- a) Workability of fresh concrete is mainly governed by placing conditions and compaction. The degree of workability necessary to allow the concrete to be well compacted and worked into the corners of formwork and around the reinforcement shall be as stipulated under clause no. 7.0 of IS: 456.
- b) The workability of concrete shall be checked at frequent intervals. The workability of concrete measured in accordance with IS: 1199 for every sample taken for testing shall be recorded with the corresponding cube test result.
- c) Notwithstanding the above, the slump to be maintained for work in progress shall be as per directions of the Engineer.
- d) Engineer may permit use of plasticizers for improving workability. Use of certain other admixtures such as water proofing compounds also have an effect on workability and shall be considered during mix design.

6.14 Durability of concrete:

- a) The durability of concrete is mainly governed by the permeability of concrete. Dense concrete is least permeable. In addition, cement content and water-cement ratio and compaction of concrete play a major role in producing impermeable concrete.
- b) Durability requirements decided depending on the exposure conditions as stipulated in clause 8.2 of IS 456 are to be taken into account while designing the mix. For given aggregates, the cement content should be sufficient to make sufficiently low water cement ratio and table 5 of IS: 456-2000 shall be taken as guideline for durability considerations.
- c) Stipulations of minimum cement content and limiting water cement ratio should be considered during design of mix.

6.15 Design Mix Concrete

- a) Design Mix Concrete shall be used for all reinforced concrete works. The mix proportions shall be as per mix design, designed for each grade of concrete, workability and durability requirements. The characteristic strength shall not be less than the appropriate values given in Table-2 of IS: 456:2000.
- b) In proportioning concrete, the quantity of both cement and aggregates shall be determined by mass. Water shall be either measured by volume in calibrated tanks or weighed. All measuring equipment at site shall be maintained in a clean and serviceable condition, and their accuracy shall be periodically checked.
- c) To keep the water-cement ratio to the designed value, allowance shall be made for the moisture contents in both fine and coarse aggregates and determination of the same in accordance with IS: 2386 Part (III) shall be made as frequently as directed by the Engineer.

d) With the permission of the Consultant, for any of the above mentioned grades of concrete, if the water quantity has to be increased, proportionately cement quantity shall also be increased, to keep the ratio of water to Cement same as adopted in mix design for the corresponding grade of concrete. The extra cement required on account of this shall be at no extra cost to Owner.

6.16 Mix design: Mix design shall generally be done at any of the approved laboratory. The following is the guideline to be followed:

a) IS: 10262 shall be followed as general guidance for mix design. The minimum value of target strength of design mix of various grades of concrete shall be as per clause no. 9.2 of IS: 456. However, the Consultant may allow change in target strength values based on adequate numbers of works test results.

b) Minimum cement content from durability consideration for different exposures and sulphate attack shall be as given in Table-4 and 5 of IS: 456. In case higher value is obtained from strength consideration, same shall be provided. c) Preliminary tests/trial mix, as specified or as required by the Engineer, shall be carried out sufficiently ahead of the actual commencement of the work with different grades of concrete made from representative samples of aggregates and cement expected to be used on the works. These tests are to be conducted to arrive at the grading of aggregates, water-cement ratio, workability and the quantity of cement required to give Preliminary (target) compressive strengths as specified in clause 9.2 of IS 456.

c) At least four trial mixes are to be made and minimum six test cubes taken for each trial mix noting the slump for each type of mix. The cubes shall then be properly cured and three cubes for each mix shall be tested in a laboratory (approved by the Engineer) at 7 days and others at 28 days for obtaining the compressive strength. The test reports shall be submitted to the Engineer. The design mix particulars shall indicate, with the help of graphs and curves etc. the extent of variation in the grading of aggregates which can be allowed.

d) While designing mixes, over wet mixes shall be avoided. For the structures, where assessment of early strength is required the concrete cubes shall also be tested for early age strength at 1 day and 3 days for establishing the values.

e) The Contractor shall submit the test reports of mix design to the Engineer for his review, indicating design criteria, analysis and proportioning of materials, etc. On the basis of the above test reports, a mix proportion by mass and the water-cement ratio, shall be determined by the Contractor such that concrete prepared with this mix will yield the desired characteristic strength and shall have suitable workability. The mix design to be adopted on the works shall be subject to the approval of the Engineer. The proportions, once decided for different grades of concrete, shall be adhered to, during all concreting operations as long as the quality of the materials does not change. If, however, at any time, the quality of materials being used has changed from those for Preliminary mix design, or there is a change either in the required strength of concrete, or water-cement ratio or workability, the Contractor shall have to make similar trial mixes and Preliminary tests to ascertain the revised mix proportions and water-cement ratio to be used for obtaining the desired strength and consistency.

f) The entire cost of all the trial mixes including all the preparatory works for trial mixes, preparation of test cubes and their testing shall be borne by the Contractor.

6.17 REINFORCEMENT PLACEMENT

6.17.1 All reinforcement for concrete works shall be provided as per the drawings or as indicated in the schedule of items. The Contractor shall prepare and furnish to the , bar bending schedules for all RCC works for his review and approval. No work shall commence without the approval of the bar bending schedules by the Engineer in writing.

6.17.2 The contractor shall plan the procurement of steel well in advance and complete the surface treatment, if specified in a planned manner. In case of non availability of certain diameters Consultant may permit substitution of bars. However such substitutions shall be the last resort and shall not be a reason for delay. The Contractor shall modify the bar bending schedule, and specific approvals of Engineer obtained.

6.17.3 All bars shall be thoroughly cleaned before being fabricated. Pitted and defective bars shall not be used. All steel for reinforcement shall be free from loose scales, rust coatings, oil, grease, paint or other harmful matters immediately before placing the concrete. To ensure this, reinforcements with rust coatings shall be cleaned thoroughly before bending/placement of the same.

6.18 Inspection & testing :Erected and secured reinforcement shall be inspected and approved by Consultant prior to placement of concrete. Sample bent bars shall be checked to ensure that they conform to the bar bending schedules. Reinforcement in position shall be checked for proper positioning, and rigidity, cover, spacing of bars, placement of chairs and spacers. etc. Also it shall be checked that all bars at crossings are properly tied.

6.18.1 Each batch of reinforcement procured shall be accompanied with manufacturer's test certificate. In addition, Consultant may direct the reinforcement to be tested independently. Reinforcement shall be tested in reputed testing laboratory, approved by Consultant. The frequency of testing shall be as stipulated by Consultant. The cost of testing shall be borne by the contractor.

6.19 MIXING OF CONCRETE :Concrete shall be mixed in a mechanical mixer conforming to IS: 1791. Water shall not be added into the drum of the mixer, until all the cement and aggregates constituting the batch are already in the drum and dry mixed for at least one minute and are uniformly distributed. Water shall then be added and mixing of each batch shall be continued until there is a uniform distribution of the materials and the mass but in no case shall mixing be done for less than one and half minutes and for at least 40 revolutions after all the water and materials are in the drum. When absorbent aggregates are used or when the mix is very dry, the mixing time shall be extended as directed by the Engineer. Mixers shall not be loaded above their rated capacity as this prevents thorough mixing.

6.19.1 The entire contents of the drum shall be discharged before the ingredients for the next batch are fed into the drum. No partly set or remixed or excessively wet concrete shall be used and it shall be immediately removed from site. Each time if the work stops for more than 30 minutes, the mixer shall be thoroughly cleaned and when the next mixing commences, the first batch shall have 10% additional cement.

6.20 Batching of Concrete

6.20.1 Cement shall always be batched by weight. A separate weighing device shall be provided for weighing cement. Where the weight of cement is determined by accepting the weight per bag, number of bags shall be weighed separately to determine the average net weight of cement per bag and the same shall be checked regularly.

6.20.2 Aggregates shall always be batched by weight. A suitable weigh batching equipment with a valid calibration certificate duly approved by the consultant shall be used.

6.20.3 Where the aggregates are moist and volume batching is adopted, allowance shall be made for bulking in accordance with IS 2386 (Part-III). Suitable adjustments shall be made for the variation in the weight of aggregates due to variation in their moisture contents.

6.20.4 Water may be measured either by weight or by volume. When measured by volume, it shall be by well calibrated conical shaped jar or vessel or from a calibrated tank fitted to the mixer. It is very important to maintain the water cement ratio constant at its correct value. For the correct determination of amount of water to be added in the concrete mix, to maintain the water cement ratio constant, the amount of moisture content in both coarse and fine aggregates shall be taken into consideration, be as frequently as possible. The frequency for a given job being determined by the Consultant according to weather conditions.

6.20.5 Any solid admixture, to be added, shall be measured by weight, but liquid or semi-liquid admixture may be measured by weight or volume.

6.21 TRANSPORTATION OF CONCRETE

6.21.1 Concrete shall be handled and conveyed as rapidly as practicable, from the place of mixing to the place of final laying, by approved means, before the initial setting of the cement starts. Concrete shall be conveyed in such a way that there is no segregation or loss of any of the ingredients and maintaining the required workability. If segregation does occur during transport, the concrete shall be remixed. During very hot or cold weather, if directed by the Engineer, concrete shall be transported in deep containers which will reduce the rate of water loss by evaporation in hot weather and heat loss in cold weather, at no extra cost to Owner.

6.21.2 Conveying equipment for concrete shall be mortar tight, well maintained and thoroughly cleaned before commencement of concrete mixing. Such equipment shall be kept free from set concrete. Chutes shall not be used for transport of concrete without the written permission of the Consultant. The chute in case permitted to be used shall be of such size and design as to ensure practically continuous flow. Slope of the chute shall be so adjusted that the concrete flow without the use of an excessive quantity of water and without segregation of its ingredients. The delivery end of the chute shall be as close as possible to the point of deposit.

6.21.3 Concrete may be conveyed and placed by mechanically operated equipment, e.g. pumps or pneumatic placers only with the written permission of the Consultant, who shall also review the entire scheme for which comprehensive details shall be furnished by the Contractor.

6.21.4 All equipment used for mixing, transporting and placing of concrete shall be maintained in clean condition. All pans, buckets, hoppers, chutes, pipe lines and other equipments shall be thoroughly cleaned after each period of placement.

6.22 CONCRETE PLACING :

Final inspection and approval prior to concrete placement:

6.22.1 Before the concrete is actually placed in position, the inside of the form work shall be inspected to see that they have been cleaned and oiled. Temporary openings shall be provided to facilitate inspection, especially at bottom of columns and wall forms, to permit removal of saw dust, wood shavings, binding

wire, rubbish, dirt etc., Opening shall be placed or holes drilled so that these materials and water can be removed easily. Such openings / holes shall be later suitably plugged.

6.22.2 Prior to concrete placement, all works shall be inspected and approved by Consultant, and if found unsatisfactory, concrete shall not be poured until all defects have been corrected at contractors cost. Approval by Consultant of any and all materials and work as required herein shall not relieve contractor from his obligations to produce sound concrete in accordance with the drawings and specifications

6.22.3 Formwork and reinforcement shall be approved in writing by the Consultant before concrete is placed. Concrete shall be placed only after all preparations for casting have been approved by the Consultant and approval given to proceed with the casting in writing on pour card to be maintained by the Contractor for this purpose and to be submitted along with the Contractor's bills.

6.22.4 Placement

6.22.4.1 Concrete shall be placed and compacted in its final position before the cement reaches the initial set and normally concrete shall be compacted in its final position within 30 minutes of leaving the mixer.

6.22.4.2 Where direct placement is not possible, the Contractor shall provide suitable arrangements such as chutes, tremie, elephant trunks, etc. to confine the movement of concrete as directed by the Consultant. Concrete shall not be dropped from a height or handled in a manner which may cause segregation.

6.22.4.3 If concrete is placed by pumping, the consistency shall be the minimum necessary for such conveyance of concrete. Before commencement of regular pumping, the pipeline shall be lubricated by cement mortar (1:2), and once pumping commences, stoppages shall be avoided.

6.22.4.4 The placing of concrete shall be a continuous operation with no interruption in excess of 30 minutes between the placing of continuous portions of concrete.

6.22.4.5 Concrete shall be placed in continuous horizontal layers of 150 mm or higher thickness as directed by the Consultant and thoroughly compacted before placing next layer. The thickness of each layer shall be such that it will be deposited before the previous layer has stiffened. When placing concrete through reinforcing steel, care shall be taken to prevent segregation of the coarse aggregates.

6.22.4.6 Slabs, beams and similar members shall normally be poured in one operation. In special circumstances, with the approval of the Consultant, these can be poured in horizontal layers, but it must be ensured that the under layer is not already hardened. Bleeding of under layer, if any, shall be effectively removed. Moulding, throating, drip course, etc. shall be poured as shown on the drawings or as desired by the Consultant.

6.22.4.7 Mass Concrete shall be poured in lifts not exceeding 1.0 m in height unless otherwise indicated on drawings or as directed by the Consultant. Horizontal lift shall not be more than 150 cm in thickness, according to provision of IS:456.

6.22.4.8 No concrete shall be placed in wet weather or on water covered surface. Any concrete that has been washed by heavy rain shall be entirely removed, if there is any sign of cement and sand having been washed away from the concrete mixture. To guard against damage which may be caused by rain, the works shall be covered with tarpaulins immediately after the concrete has been placed and compacted before leaving the work unattended. Any water accumulating on the surface of the newly

placed concrete shall be removed by approved means and no further concrete shall be placed thereon until such water is removed. To avoid flow of water over / around freshly placed concrete, suitable drains and sumps shall be provided.

6.22.4.9 Concrete must be placed in its final position before it becomes too stiff to work. On no account water shall be added after the initial mixing. Concrete which has become stiff or has been contaminated with foreign materials and which has not been placed within half an hour of mixing water with cement shall be rejected.

6.22.4.10 For members involving vertical placing of concrete (eg. Columns, walls, etc.), each lift shall be deposited in horizontal layer extending the full width between shuttering and of such depth that each layer can be easily and effectively vibrated and incorporated with the layer before by means of compaction.

6.22.4.11 Should any unforeseen occurrence results in a stoppage of concreting for one hour or such other time as might allow the concrete, already placed, to begin to set before the next batches can be placed, the Contractor shall make at his own cost, suitable tongue, and groove construction joint, as approved by the Engineer. Any additional reinforcement required as directed by the Engineer shall also be provided by the Contractor at his own cost. Before placement of new batches of concrete over that construction joint, the surface preparation according to this specification stipulated earlier, shall be done by the Contractor at his own cost.

6.23 COMPACTION

5.23.1 After the concrete has been placed, it shall be spaded and thoroughly compacted by approved mechanical vibrators to a maximum subsidence without segregation and thoroughly worked around reinforcement or other embedded fixtures into the correct form and shape. Care must be taken to ensure that the inserts, fixtures, reinforcement and formwork are not displaced or disturbed during placing of concrete.

6.23.2 Vibrators shall penetrate both the layer poured and the under layer to ensure good bond and homogeneity and to prevent the formation of cold joints. Immersion vibrators shall not be allowed to come in contact with steel reinforcement after start of initial set. Also, they shall not be allowed to come in contact with forms or finished surfaces. Immersion vibrators shall have a 'no load' frequency, amplitude and acceleration as per IS: 2505 depending upon the size of the vibrator. Immersion vibrators shall be operated by experienced men. These vibrators shall be immersed not more than 450 mm apart and withdrawn when air bubbles cease to come to the surface. Such vibrators shall in no case be used to push concrete inside the forms and vibrators shall be withdrawn slowly.

6.23.3 Whenever vibration has to be applied externally, the design of formwork and the disposition of vibrators shall receive special consideration to ensure efficient compaction and to avoid surface blemishes. Surface vibrators and form attached vibrator shall not be permitted under normal conditions. Their use shall require written approval of the Consultant.

6.24 PROTECTION AND CURING OF CONCRETE

6.24.1 Protection:

Newly placed concrete shall be protected by approved means from rain, sun and wind. Concrete placed below ground level, shall be protected from falling earth, during and after placing. Concrete placed in ground containing any deleterious substances, shall be kept free from contact with such ground or with

water draining from such ground, during placing of concrete and for a period of at least three days or as otherwise instructed by the Engineer.

6.24.2 The ground water around newly poured concrete shall be kept down to an approved level by pumping or other approved means of drainage. Adequate steps shall be taken to prevent floatation or flooding. Steps, as approved by the Engineer, shall be taken to protect immature concrete from damage by debris, excessive loading, vibration, abrasion, mixing with earth or other deleterious materials, etc. that may impair the strength and durability of the concrete.

6.24.3 Curing:

As soon as the concrete has hardened sufficiently, it shall be kept in a damp or wet condition by ponding or by covering with a layer of sacking, canvas, hessian or similar materials and kept continuously wet for at least seven days after final setting. This period may be extended, at the discretion of the Engineer, upto fourteen days. Curing of horizontal surfaces exposed to drying winds shall begin immediately after the concrete has hardened. Concrete slabs and floors shall be cured for the periods mentioned above by flooding with water of minimum 25 mm depth. Quantity of water applied shall be such as to prevent erosion of freshly placed concrete.

6.24.4 Approved curing compounds may be used in lieu of moist-curing with the permission of the Engineer. However, such permission may be granted only in specific cases. Such compounds shall be applied to all exposed surfaces of the concrete, as soon as possible after the concrete has set. Curing compounds shall be liquid type while pigmented, conforming to U.S. Bureau of Reclamation Specification. No curing compound shall be used on surface where future blending with concrete, water or acid proof membrane or painting is specified.

6.25 CEMENT ADDITIVES/ADMIXTURES IN CONCRETE

6.25.1 The admixtures shall conform to IS:9103 and shall be of proven make and from a reputed manufacturer. In addition, for plasticizer-cum-water proofing compound, materials shall meet the permeability requirements as per IS:2645. Similarly for plasticizer-cum retarder admixture material shall satisfy the setting time requirements of retarder and other properties of plasticizer as per IS:9103.

6.25.2 Admixture may be used in concrete only with the approval of Engineer based upon evidence that, with the passage of time neither the compressive strength nor its durability reduced. When admixtures are used, the designed concrete mix shall be done with the admixture. Admixtures shall be used as per manufacturer's instructions and in the manner and with the control specified by Engineer.

6.25.3 Calcium Chloride: Calcium chloride shall not be used for accelerating set of the cement for any concrete containing reinforcement or embedded steel parts. When calcium chloride is permitted to be used, such as in mass concrete works, it shall be dissolved in water and added to the mixing water in an amount not to exceed 1.5 percent of the weight of cement in each batch of concrete.

6.25.4 Admixtures in concrete for promoting workability, improving strength, entraining air or for similar purposes may be used only after the written permission from the Engineer, is obtained. Addition of admixtures shall not reduce the specified strength or durability of concrete in any case.

6.25.5 The Contractor shall furnish all labour and equipment to place and mix water proofing cement additive and cement plasticiser in concrete of any grade and cement mortar. Thereafter, he shall carry out the work as specified earlier in relevant clauses of this specification for concrete and hence complete the work as indicated on the drawing and as per the specification listed hereunder.

6.26 Classification of admixtures:

6.26.1 Admixture can be classified as under:

- a) Air Entraining Agents: Where specified and approved by Engineer, neutralized vinsol resin or any other approved air entraining agent may be used to produce the specified amount of air in the concrete mix and these agents shall conform to the requirements of ASTM standard 6.260. Air entraining admixtures for concrete. The recommended total air content of the concrete is 4% (+/-) 1%. The method of measuring air content shall be as per IS: 1199.
- b) Retarding Admixtures: Where specified and approved by Engineers, retarding agents shall be added to the concrete mix in quantities specified by Engineer.
- c) Water Reducing Admixtures: Where specified and approved by Engineer, water reducing lingo sulfonate mixture shall be added in quantities specified by Engineer. The admixtures shall be added in the form of solution.
- d) Water Proofing Agents: Where specified and approved by Engineer, chloride and sulphate free water proofing agents shall be added in quantities specified by Consultant. Water proof cement additive shall conform to IS:2645 and shall be of proven make and from a reputed manufacturer.
- e) Other Admixtures: Consultant may at his discretion, instruct contractor to use any other admixture in the concrete.
- f) Admixtures/water proofing additive shall be used at the rate specified by the manufacturer or as indicated on the drawings and shall be mixed with water, as required by the Engineer.

6.27 SUB - BASE

6.27.1 The cement concrete pavement shall be laid over the sub-base constructed in accordance with the relevant drawings and Specifications. If the sub-base is found damaged at some places or it has cracks wider than 10mm, it shall be repaired with fine cement concrete or bituminous concrete laying separation layer. Prior to laying of concrete it shall be ensured that the separation membrane is placed in position and the same is clean of dirt or other extraneous materials and free from any damage.

6.28 Weather and Seasonal Limitations

6.28.1 Concrete during monsoon months: When concrete is being placed during monsoon months and when it may be expected to rain, sufficient supply of tarpaulin or other water proof cloth shall be provided along the line of the work. Any time when it rains, all freshly laid concrete which had not been covered for curing purposes shall be adequately protected. Any concrete damaged by rain shall be removed and replaced. If the damage is limited to texture, it shall be retextured in accordance with the directives of the Engineer.

6.28.2 Concreting in hot weather: No concreting shall be done when the concrete temperature is above 30 degree centigrade. Besides, in adverse conditions like high temperature, low relative humidity, excessive wind velocity, imminence of rains etc., if so desired by the Engineer, tents on mobile trusses may be provided over the freshly laid concrete for a minimum period of 3 hours as directed by the Engineer. The temperature of the concrete mix on reaching the paving site shall not be more than 30°C. To bring down the temperature, if necessary, chilled water or ice flakes should be made use of. No

concreting shall be done when the concrete temperature is below 5 degree Centigrade and the temperature is descending.

6.29 SAMPLING, TESTING AND QUALITY ASSURANCE

6.29.1 General

Concrete cubes for works tests shall be cured under laboratory conditions, except when in the opinion of the Consultant, extreme weather conditions prevail at which time, these may require curing under job conditions.

6.29.2 For the purposes of statistical analysis, any substandard cube result, which in the opinion of the Consultant, is due to improper sampling, moulding or testing shall be discarded and a dummy result shall be substituted. The value of a dummy result shall be equivalent to the average value of the cubes from the same grade of concrete tested immediately before and after the discarded result. The number of such substandard cubes shall not exceed 5%. If the 'strength' of the laboratory controlled cubes, for any portion of the concrete work, falls below the compressive strength specified, the Engineer shall have the right to order a change in the proportions or the water content for the remaining portion of the structure.

6.29.3 If the 'strength' of the works cured test cubes falls below the specified strength, the Engineer shall have the right to require provisions for temperature and moisture control during the period of curing as necessary to secure the required strength, and may require retests in accordance with the 'standard method of securing, preparing and testing specimens from hardened concrete for compressive and flexural strengths, or load tests to be made on the portion of the building so affected. All such tests shall be made at the Contractor's expense.

6.29.4 Unacceptable concrete work shall be dismantled by the Contractor and replaced by fresh work, meeting the specification requirements. In the course of dismantling, if any damage is done to the embedded items or adjacent structures, the same shall be made good, by the Contractor, to the satisfaction of the Engineer, at no extra cost.

6.29.5 Only as a very special case and that too in non-critical areas, the Engineer may accept concrete work which is marginally unacceptable as per the criteria laid down in IS:456. For such accepted work, payment shall be made at a reduced rate pro rata to the concrete cube strength obtained, against that stipulated.

6.29.6 If directed by Engineer, Ultrasonic tests on structures to ascertain the quality and grade of concreting shall be carried out. Contractor shall arrange for the specialised agency for conducting the test at his cost. The Contractor shall provide all the necessary facilities and arrangement for conducting the test at site in terms of access, scaffolding etc. In case of any defects, the Contractor shall rectify the same as directed by the Consultant. Rebound hammer test shall be carried out for ascertaining the quality of concrete work, as directed by the Engineer.

6.30 Optional Tests:

a) Engineer, if desires, may order for tests to be carried out on cement, sand, coarse aggregate, water etc., in accordance with the relevant Indian Standards.

b) Tests on cement will be carried out by a reputed and recognized institutions and shall include (i) fineness test, (ii) test for normal consistency, (iii) test for setting time, (iv) test for soundness (v) test for

compressive strength, (vi) test for heat of hydration (by experiment and by calculations) in accordance with IS :269.

c) Tests on sand shall included (i) sieve test, (ii) test for organic impurities, (iii) decantation test for determining clay and silt content, (iv) specific gravity test, (v) test for unit weight and bulkage factor, (vi) test for sieve analysis and fineness modulus.

d) Tests on coarse aggregate shall include (i) sieve analysis, (ii) specific gravity and unit weight of dry, loose and rodded aggregate, (iii) soundness and alkali aggregate reactivity, (iv) petrography examination, (v) deleterious materials and organic impurities, (vi) test for aggregate crushing value.

6.31 Sampling of Concrete

Samples from fresh concrete shall be taken according to IS: 1199 and tested as per IS: 516. Normally only compressive test shall be performed but the Consultant may require other tests to be performed in accordance with IS: 516. Trial Mix & mix design: At least four trial mixes shall be made with minimum 6 test cubes for each mix.

6.32 Works Tests:

The minimum frequency of sampling of concrete of each grade shall be according to clause 15.2.2 of IS:456. However, after getting continuous satisfactory results and in the case of voluminous concrete works, the Consultant may at his discretion reduce the frequency of sampling as follows.

a) For each grade of concrete, and for each 8 hours (shift) of work or part thereof, at least one sample consisting of six specimens shall be taken from each 150 cum. of concrete or part thereof, 3 specimens shall be tested at 7 days and remaining 3 shall be tested at 28 days. However, in all cases, the 28 days compressive strength shall alone be the criterion for acceptance or rejection.

b) To control the consistency of concrete from every mixing, slump tests and compaction factor tests in accordance with IS: 1199 shall be carried out by the Contractor every two hours or as directed by the Consultant. Slumps corresponding to the test specimens shall be recorded for reference.

c) The strength of sample shall be the average of the strength of three specimens. The individual variation should not be more than $\pm 15\%$ of the average.

7 Pavement with Interlocking Paver Blocks

The Paver Block shall be made in factory which has a COLUMBIA paver block making machine or equivalent with following minimum required facilities mentioned in **IRC:SP:63(latest Edition)**

TECHNICAL SPECIFICATIONS FOR LAYING CONCRETE PAVING BLOCKS

7.1 Base

7.1.1. The Finished surface of the concrete base shall match the design profile of the concrete blocks within ± 10 mm.

7.1.2. Compaction shall be done with vibratory roller. In restricted areas where normal rollers Not operate, hand-held or plate vibrators should be employed.

7.2 Bedding Sand /fines Layer

7.2.1 The bedding sand layer shall be from either a single source or blended to achieve the following grading.

IS Sieve Size	Per cent Passing
9.52mm	100
4.75 mm	95-100
2.36mm	80-100
1.18mm	50-95
600 micron	25-60
300 micron	10-30
150 micron	0-15
75 micron	0-10

Single sized, gap-graded sands or those containing an excessive amount of fines will not be used. sand particles should preferably be angular type.

The joint-filling sand should pass a 2.35 mm sieve and be well graded. The following grading is recommended:

Sieve Size	Per cent Passing
2.36 mm	100
1.18mm	90-100
600 micron	60-90
300 micron	30-60
150 micron	15-30
75 micron	0-10

The use of cement in the joint-filling sand is not recommended as a general practice as the cemented sand is likely to crack into segments which are easily dislodged.

7.2.2 Average thickness of this laying course shall be 20 to 40 mm.

7.2.3 The sand should be slightly moist, and the moisture content shall be about 4 per cent

7.2.4 It should contain not more than 3 per cent by weight of clay and silt and the material shall be free from deleterious salts or contaminants.

7.2.5 The finished surface of the bedding layer shall match exactly the design profile indicated on the drawings.

7.2.6 Before placing the bedding layers, the surface of concrete should be cleared by sweeping.

7.2.7 Walking or driving on the finished surface of the bedding layer shall not be permitted

7.3 Concrete Paving Blocks

7.3.1 Laying of the blocks shall be done, precisely at the indicated level and profile and in way that a good surface draining to the gully chambers is assured

7.3.2 Around gully chambers and inspection pits the pavement shall have a level of 5mm higher than the above mentioned elements.

7.3.4 The blocks shall be laid to the pattern directed by the Engineer or the pattern recommended by the designer. The blocks shall be laid as tight as possible to each other. The maximum joint width shall be limited to 4 mm.

7.3.5 Laying of broken blocks is not allowed except along connections or edges. The maximum length of a purpose broken block is 100 mm. Breaking of the blocks shall be done with a 'block splitter' or a mechanical saw.

7.3.6 Fine angular sand as per specification shall be brushed into the joints, and thereafter compaction shall be done with a vibrating plate compactor on a clean surface. After compaction, again fine angular sand shall be brushed into the joints.

7.4 Surface Tolerances

7.4.1 Surface tolerance for finished surface shall be ± 10 mm from the design level.

7.4.2 The surface tolerance for base course shall be in the range of 0 to +10 mm from nominated level and 10 mm deviation from a 3 m straight edge.

7.4.3 The surface tolerance for sub-base shall be within 0 to -20 mm of nominated level.

7.5 FIELD/LABORATORY TESTS

(a) Necessary field/laboratory tests shall be carried out by the contractor while executing the work at his own cost.

(b) The field/laboratory tests may be conducted in an Engineering College/ approved technical institution as directed by the Engineer.

**CHIEF ENGINEER
MORMUGAO PORT TRUST**

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36 /2018

Name of Work: “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”

ADDITIONAL SPECIAL INSTRUCTIONS.

1.0 SECURITY DEPOSIT

- The contractor at his own expense shall have to provide to Mormugao Port Trust an unconditional and irrevocable Demand Draft /Bank Guarantee from Nationalised Bank, within **21days** from the date of LOA, in favour of “Mormugao Port Trust”, as Security Deposit.
- On receipt of full deposit as arrived above in any manner aforesaid the Earnest Money submitted with the Tender will be refunded. No interest will be allowed on the earnest money from the date of its receipt until it is refunded. In the case, however for unsuccessful Tenderers, Earnest Money will be refunded, as soon as possible after the finalisation of L1 of the contract. Alternatively the successful Tenderer shall when his tender is accepted, furnish Earnest Money. The Earnest Money shall retain its character as such, till the Security Deposit is furnished by the Tenderer.
- Forfeiture of SD: The security deposit will be forfeited, if the contractor fails to fulfill any or all the conditions of this contract, without any interference from it towards all rights of the Board to recover from the contractor any other amounts falling due to the Board through non-observance/compliance by the contract conditions and any of the clause thereof by the contractor.

2. SIGNING OF AGREEMENT

- a) The Contractor shall execute an Agreement with the Trust within 15 days after confirmation of Bank Guarantee by the Banker.
- b) The cost of stamping the contract Agreement and cost of preparation of contract document (1 original + 4 copies) must be borne by the successful Bidder. Stamp paper **of Rs.1000/-** shall be from the **Local authorized vendor in Goa** for the purpose of contract agreement.
- c) The place of stamping and signing of Agreement shall be at **MPT only.**

Further, if the successful Contractor undertakes, to enter into and execute, when called upon to do so, an Agreement, with such modifications as agreed upon and unless and until the formal Agreement is prepared and executed, the successful Contractor’s offer, Trust order and the written acceptance for the receipt of Trust order of the successful Contractor shall form a binding Contract between the Trust and the Contractor. The Contract Agreement shall include amended final tender document, pre- bid queries, various clarification letter, written approval by the Trust authorities,

3.0 **LABOUR**

- a. The Contractor shall make his own arrangements for the engagement of all labour for doing the work at site or in respect of or in connection with the execution of work as also for the transport, housing, feeding and payment thereof. Since time is the essence of this Contract, requisite number of labour force has to be kept, so as to complete the Installation, Testing and Commissioning of the equipment within the completion period as stipulated in the tender.
- b. In the event of any outbreak of illness or an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.
- c. The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.
- d. The Contractor shall at all times during the continuance of the Contract comply fully with all existing Acts, Regulations and bye law as including all statutory amendments and re-enactment of state or Central Government and other local authorities and any other enactment and acts that may be passed in future either by the State or the Central Government or local authority, including Indian Workmen's Compensation Act, Labour Laws and Equal Remuneration Act, 1976, Factories Act, Minimum Wages Act, IE Act 1956, etc.
- e. If as a result of Contractor's failure, negligence, omission, default or non-observance of any provisions of any laws, MPT is called upon by any authority to pay or reimburse or required to pay or reimburse any amount, MPT shall be entitled to deduct the same from any moneys due or that they become due to the Contractor under this Contract or any other Contract or otherwise recover from the Contractor any sums which MPT is required or called upon to pay or reimburse on behalf of the Contractor. All registration and statutory inspection fees in respect of his work pursuant to the Contract shall be paid by the Contractor.
- f. The Contractor shall pay the labourers engaged by him on the work not less than a fair wage, which expression shall mean, whether for time or piece work, rate of wages as may be fixed by the Labour Department of the State as per the Minimum wages Act. Contractors are advised to ensure that their labour have a Bank account for the purpose of transfer of salary directly into their accounts. Contractor shall have to transfer the salaries directly into the account of the labour that they employ for the work.
- g. The Contractor or his sub-Contractor shall not employ a young child who has not completed his fifteen year of age. He/they shall also not employ an adolescent who has not completed his eighteenth year unless he is certified fit for the work as an adult as prescribed under Clause (b) of subsection (2) of section 69 of the Factories Act.1948.

- h. The Contractor shall also comply fully with the provisions of the payment of Wages Act, 1936.
- i. If any enhancement in the rates of Wages becomes payable as a result of the implementation of the Chief labour Commissioner's interpretation of the Contract, Labour (Regulation and Abolitions) Central Rules 1971 including an increase of the Wages, the same shall be borne by the Contractor/Contractors. The Contractor shall be responsible for the observance by his sub-Contractors, of the foregoing provisions/precautions.
- j. The Contractor shall make necessary arrangements for the representative of the Port and/or his representative to witness the payment made by the Contractor to his labourers. The Contractor shall also submit periodical returns of labour employed by him and wages paid, to the Port's representatives.
- k. The Contractor shall at his own expenses provide all safety gear for all labourers engaged during the work and failing to do so, MPT shall provide the same and recover the cost thereof from any amount due or which may become due to the Contractor or from any amount lying with them or under their control.

The contractor shall inspect the site of work to acquaint himself with the nature and location of the work, all the general and local conditions and be satisfied himself before tendering as to the correctness and sufficiency of his tender for the work and of his prices stated in the tender to cover all his obligations under the contract. He has to submit a certificate of inspection duly signed by him and the Port representative as part of compulsory obligation under cover-I failing which, the tenderer is liable to be rejected outright.

**CHIEF ENGINEER
MORMUGAO PORT TRUST**

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36/2018

Name of Work: “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”

SPECIAL CONDITIONS OF CONTRACT (SCC)

- 1 The Tenderer shall examine carefully the General Rules and Directions, General and Special Conditions of Contract, Technical Specifications and Drawing and shall inspect the site to acquaint himself with the nature of work local working conditions etc., for the purpose of making his offer on his own responsibility.
- .2 It shall be open to the Chief Engineer to nominate one or more of his representatives to supervise the work and to satisfy about the quality of materials and workmanship as required by the relevant regulation and as mentioned in technical specifications. The decision of the Chief Engineer shall be final as regards the quality of materials and workmanship shall be binding on the Tenderer.
- 3 The prices shall be firm and not subject to fluctuation at any stage till the completion of the contract. The prices quoted must be filled in ink both in figures and words in the Schedule of prices attached with the Tender document. The prices quoted shall be inclusive of duties, freight, insurance, unloading etc., exclusive of GST and any correction shall be supported by the tenderer’s signature there against.
- 4 The Tenderer shall provide any items, which have not been specifically mentioned in the specification, but which are found necessary for completion, efficient installation and operation of works shall be deemed to be included in the contract without incurring any additional expenditure to the Port.
- 5 The tender shall be accompanied by sufficient details of materials included in the offer with catalogue and sketches wherever necessary for comprehensive assessment of its merits and performance.
- 6 It will be entirely the Tenderer's responsibility to take required steps to adequately safeguard the personnel carrying out the work and to ensure that the work is carried out in such a manner that maximum safety to the personnel is assured.
- 7 The decision of the Chief Engineer or his representative regarding the quality of any materials

used on the work will be final and binding on the Tenderer. The Tenderer shall remove from the site of work any material rejected as unfit for use on the work at his own cost as soon as he is ordered to do so, failing which the Chief Engineer or his representative shall remove such material from the site of work and shall deduct the cost incurred by such removal by the Board from any money due to the Tenderer.

- 8 The Tenderer shall co-ordinate his work with that of other Tenderers executing other works in the site and plan his work as to minimize inconvenience to others in the work site.
- 9 The watch and ward and storage of materials will be Tenderer's responsibility and the Board shall not be held responsible for any loss of the material.
- 10 The Tenderer shall be deemed to have satisfied himself before submitting the tender as to the correctness and sufficiency of his tender for the work and of his price stated in the schedule as to cover his entire obligation under the contract for completion of the work.
11. Contractor shall provide a four wheeler Motor Vehicle (Petrol/ Diesel) such as Maruti Wagon R - Tata Indica / Hyundai i-10 /Mahindra Bolero– or similar approved) with driver for the use of supervisory staff of Mormugao Port to visit the site and for other official matters related to the site work on all days (including Sundays and Holidays). However actual duty hours shall be specified by actual users of the vehicle during site working days. In case of breakdown of vehicle, similar replacement vehicle shall be arranged by the contractor/bidder without any delay. All payment/ cost towards maintenance/repair, petrol/diesel, taxes, insurances for the vehicle, gate entry passes for driver and vehicle, drivers wages, parking fees, toll fees shall be borne by the contractor/bidder. Cost towards above vehicle alongwith driver and transport facilities shall be included in the overall project cost. No additional payment will be made by the Port on the above . The Port shall not bear any liability under any circumstances with respect to the above. The contractor shall also provide site office for Port Supervisory staff with necessary furniture and computer facilities. The contractor shall set up laboratory at site with necessary equipments for testing of materials or shall make arrangement for testing material with government approved laboratories and the cost towards testing charges shall be borne by the contractor.
12. Permission for working beyond the normal working hours of the Port or on Sundays and Public Holidays will be given to the contractor, subject to his agreeing to bear the cost of overtime, if any, which may have to be paid to the Port's supervisory staff.
13. In case the Chief Engineer or his representative finds that the quality of the work is unsatisfactory during the progress of work remedial action including reduction of payment on pro-rata basis will be taken from the contractors running account bills.
14. The contract is liable to be terminated if the progress of work is found to be slow.
15. The quantities provided for in the Schedule of Quantities and Rates are only approximate and are given to provide a common basis for tendering. The actual quantity may differ as per site conditions. Payments will be made according to the actual quantities of work ordered and carried out, jointly measured by the representative of the Chief Engineer and the Contractor.
16. In case the Chief Engineer or his representative finds that the quality of the work is unsatisfactory during the progress of work remedial action including reduction of payment on pro-rata basis will be taken from the contractors running account bills.

. 17. **MODE OF PAYMENT:**

The procedure for preparation and settlement of contractor's bills is as under:

- (i) **100%** of the bill will be paid within **15 working days** from the date of acceptance of undisputed bill by the Department after satisfactory completion of the work, subject to minimum interim bill amount as specified in the tender . The undisputed bill shall be based on joint measurements and shall be submitted in original plus four (4) copies (along with ESI, EPF, Muster roll, Wage register etc).The joint measurements shall be signed by the Junior Engineer, the Officer in-charge and the Contractor/ Authorised representative of the Contractor. In the absence of Junior Engineer, the joint measurements shall be signed by the Officer in-charge and the Contractor/authorised representative of the Contractor.
- (ii) The amount of any bill can be adjusted against dues to Mormugao Port Trust on any other dealing with the Mormugao Port trust.
- (iii) Retention Money will be recovered through the bills at the rate of 10% of the amount certified in each bill limited to 5% of the contract value.

18. The Chief Engineer may sanction part rates for partly executed items of work mentioned in the Schedule of Quantities and Rates as may be deemed necessary by him.

19. Contractor shall take care that his work does not, in any way, hamper the concurrent progress of works of the other agencies in and around the existing site of work, laying of cables or any other work, which will be awarded during currency of this contract. The contractor, shall accord all facilities to various agencies/ contractors such as place for storing their material place for site office, etc. in consultation with the Site Engineer and carry out his activities in close co-ordination with all agencies.

20. Materials shall be randomly tested, at Contractors cost, as directed by the Chief Engineer or his representative in Government recognised laboratory.

21. **The bidder shall quote the price exclusive of GST. Applicable GST shall be paid extra.**

**CHIEF ENGINEER
MORMUGAO PORT TRUST**

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 36 /2018

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

FORM OF TENDER

The Chief Engineer,
Mormugao Port Trust,
MORMUGAO HEADLAND SADA (GOA).

I/We _____ do hereby offer to execute the work
comprised in
the annexed Tender "**Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.**" in strict accordance with the Instructions to Tenderers, General Conditions of Contract (GCC), Specifications, etc. at the rate entered in the attached Schedule of Quantities and Rates.

2. I/We undertake to complete the work included in the Schedule of Quantities and Rates in the tender within **Six months(6) months** from the date receipt of work order .We also agree that this tender will remain open for acceptance until disposed off by the Trustees of Port Mormugao. I/We have independently considered the question of the amount of loss or damage likely to result to the Trustees from the delay on my/our part in the performance of the contract and I/We agree that the Liquidated damages at the rate of 0.5% of the contract price per week or part thereof delay in work subject to a maximum ceiling at 5% of the contract price represents a fair estimate of the loss likely to result from the delay.

3. I/We enclose herewith a sum of **Rs. 6,67,000/- (Rupees Six Lakhs Sixty Seven Thousand only)** towards **Earnest Money Deposit** in the form of Demand draft / Bank Guarantee as proof of my/our willingness to enter into the contract if my/our tender is accepted.

4. In the event of my/our tender being accepted, I/We agree to enter into a contract in the prescribed form with such alterations or additions thereto which may be necessary to give effect to the acceptance of this tender and such contract shall contain and give full effect to the specifications, Schedule of Quantities and Rates attached to this tender.

5. I/We also agree, if awarded the contract that the earnest money lodged with this tender will be retained by the Trustees towards part of the Security Deposit and to make further deposit by Demand Draft or in the form Bank Guarantee from a Nationalised Bank / Scheduled Bank , within **21 days** or such extension of the period permitted by the Chief Engineer, in writing, after receipt of information that my/our tender has been accepted by the Port Trust.

6. I/We further agree, if awarded the contract, to lodge the Retention Money equivalent to 5% of the contract price of my/our tender by way of deductions from my/our bills at the rate of 10% of the gross value of work certified in each bill till the amount of 5% of the contract price is accumulated.

7. Should this tender be accepted, I/we hereby agree to abide by and fulfill all the terms and

conditions of the said tender annexed hereto, so far as applicable or in default thereof to forfeit and pay the Board of Trustees and/or its assignees, the sum of money mentioned in the said conditions and to execute and agreement in the prescribed form with the Mormugao Port Trust **within 30 days** of the award of the contract, or in default thereof, to forfeit the **Earnest Money** deposited by me/us. Unless and until, a formal agreement is prepared and executed, this tender together with your written acceptance thereof shall constitute a binding contract between us.

8. I/we undertake, if our tender is accepted, to commence the work within **10 days** of receipt of the **Chief Engineer's orders** to commence and to complete and deliver the whole of the work comprised in the contract within the time allowed for the work.

9. A sum of **Rs. 6,67,000/- (Rupees Six Lakhs Sixty Seven Thousand only)** towards **Earnest Money Deposit** has been deposited by me/us with the Financial Adviser and Chief Accounts Officer of Mormugao Port Trust as Earnest Money, the full value of which is to be absolutely forfeited to the Board of Trustees without prejudice to any other rights or remedies of the said Board, should I/we fail to commence the work specified in the above mentioned memorandum, otherwise the said sum of **Rs. 6,67,000/- (Rupees Six Lakhs Sixty Seven Thousand only)** shall be detained by the Port Trust as a part of the Security Deposit as aforesaid.

10. I/we agree to abide by this tender to be valid for the period of six months from the date fixed for receiving/opening the same and it shall remain binding upon me/us and may be accepted any time before the expiration of that period.

11. I/we further agree that if I/we withdraw the tender before the expiration of this period of 120 days, or fail to execute an agreement in the form aforesaid **within 30 days** from the date of award of contract, the Earnest Money deposited shall be forfeited to the Board.

12. I/we understand that the Board is not bound to accept the lowest or any tender you may receive and may reject the same (the lowest) or any other tender without assigning any reason therefore.

13. "I have read and understood the General conditions and specification of the work which are printed in Volume – I supplied to me by the Department which will form a part of tender and this shall remain binding on me".

14. I/We have enclosed herewith the following completed documents as required under instructions to tenderers:-

- a) Organisation Chart.
- b) List of similar works carried out by me/us.
- c) Bar Chart.
- d) List and description of main plant and equipments proposed to be used on this work and Proforma **1 to 3**
- e) Check list and Vendor Registration Form

15. I/We have inspected the site and I am /we are fully aware of the work to be carried out while tendering for the contract.

16. (A) Mine is a proprietary firm and I am sole proprietor of the firm. My firm is/is not registered with Registrar of firms.

Name : _____ Age _____ Years

(B) Ours is a partnership firm and the names of all major partners are given below:

NAME AGE

1. _____ Years

2. _____ Years

3. _____ Years

4. _____ Years

We understand and confirm that if our offer is accepted, the contract will be entered into with the above mentioned partners only and the Trustees will not recognize or deal with any minor partners of their guardians.

(C) Ours in a company with liability and a copy of our Memorandum and Articles of Association will be sent for perusal upon acceptance of our offer.

Proposed contract is intended to be signed by a duly constituted Attorney and original power of Attorney in his favour will be submitted for perusal immediately on acceptance of the tender.

17. The name and address of our Banker is ** _____

2. My/our permanent Income Tax Accountant No. is _____.

3.

Witness's

Tenderer's

Signature _____ Signature _____

Name _____ Name _____

Address _____ Address _____

Tel. No. _____ Tel No. _____

Hand Phone (Mobile) No. _____

Date _____ Date _____

N. B. : Strike out whichever is not applicable.

Here the Name of the Bank should be stated.

NAME AND ADDRESS OF TENDERER:-

SIGNATURE OF TENDERER

Witness: - _____

Date: _____ Day of _____ 2018

Witness: - _____

Witness: - _____

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36 /2018

APPENDIX TO THE TENDER NOTICE

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8"

APPENDIX- I

The following Clauses shall be read in conjunction with respective Clauses of General Conditions of Contract (GCC)

Sr. No.	Particulars	Clause of G.C.C.(Vol. I)	
1.	Amount of Initial Security and Time.	11(1)	Five percent of the contract price and 20 months.
2	Period for commencement from the Chief Engineer's orders to commence.	38	10 days
4	Period of Completion Applicable	40	(6) Six months (after release of site.)
6	Amount of liquidated damages. Applicable if Completion of Part I delayed beyond scheduled date of completion	43	Calculated at 0.5% value of the contract per week of seven days, or part thereof subject to a ceiling of 5% value of the contract.
7.	Free Maintenance Period.	45(1)	12 (Twelve) months
8.	Percentage of retention from each	54(1)	10% on the value of each

	running account bill		running bills, limited to 5% of the contract value
9.	Limit of Retention Money	54(1)	5% value of the contract.
10	Total initial Security Deposit	11(1)	5% value of the contract.
11	Minimum amount of interim Certificate	54(1)	Rs.. 75,00,000/-
12.	Time within which payment to be made after contractor's submission of the bill based on joint measurement.	54(1)	100 % within 15 working days
13.	Mobilisation Advance	N.A	Not Applicable
14.	Interest rate on mobilization advance.	N.A	Not Applicable
15.	Mode of recovery of Mobilisation Advance	N.A	Not Applicable
16	Variation in price of labour and materials.	70	Not Applicable to this contract.
17	Arbitration Clause	66	Not Applicable to this contract.
18.	Minimum amount of third party Insurance.	Cl. No.13 to 15 of G.C.C.	5% of the tendered amount.
19.	Lease rent.	Cl. No.9 to 11 of G.C.C.	Refer Appendix III

Dated this ----- day of ----- 2018

Signature ----- in the capacity of _____

duly authorised to sign tender for and

on behalf of -----

(IN BLOCK LETTERS)

ADDRESS : -----

Witness : _____

Occupation : _____

**MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT**

TENDER No. CE/36 /2018

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

APPENDIX- II

MATERIALS TO BE SUPPLIED BY THE DEPARTMENT FOR THE WORK

Sr. No.	Description of materials	Approx. qty. to be supplied	Unit	Rate in Figures/Words	Remarks
1.	Water	--	Cubic Metre	Rs.44/m ³ (Rupees Forty for only) or as per prevailing MPT (SOR) rates	Ref. Clause No.9.19 of Special Conditions – Vol. I
2.	Electric Power	----	KWH	Electric supply as per the relevant rate applicable and supply point will be indicated by the CME's Department.	Ref. Clause No.9.20 of Special Conditions – Vol.I

Note : Above materials shall be provided subject to availability. The Contractor shall make his own arrangements in case of non-availability of the above..

SIGNATURE OF THE CONTRACTOR

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE /36/2018

APPENDIX- III

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

ESTATE RENTAL CHARGES

Sr. No.	Description	<u>Rate*</u> Rs.	Remarks
1.	Licence fees on Port land for Site Office, Stores, Labour Quarters and other structures.	Rate will be charged as per scale of rates prevailing during period of contract.	Payment shall be made to CDC Section, Finance Dept, before submission of running bills

NOTE : Location of suitable area, subject to the availability, shall be decided by the Chief Engineer.

* Rate shall be charged per 10 sq. m. or part thereof per calendar month or part thereof.

SIGNATURE OF THE TENDERER

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE /36 /2018

APPENDIX- IV

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

TURNOVER OF FIRM/ JOINT VENTURE

YEAR

TURNOVER

2015-16

2016-17

2017-18

(i.e.Last three financial years
ending 31st March of the Previous

Financial Year)

Attachments: Financial reports for the last three years. Balance sheets, profit and loss statements, auditors reports (in case of companies/corporation) etc. List them below and attach copies.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36 /2018

APPENDIX- V

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

**LIST OF PROFESSIONALS TO BE DEPUTED FOR THE SUBJECT WORK
(MINIMUM REQUIREMENTS ARE GIVEN BELOW)**

(USE CONTINUATION SHEET IF REQUIRED)

SR. NO.	NAME OF PERSON	AGE	PROFESSIONAL EXPERIENCE DETAILS	POSITION HELD IN THE FIRM	SINCE WHEN
		QUALIFICATION			
1	2	3	4	5	6
	Sr.Engineer				
	Site Engineer for quality control				
	Site engineer for supervision				

NAME, SIGNATURE
& SEAL OF TENDERER :

DATE :

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 36/2018

APPENDIX- VI

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

QUALIFICATION AND EXPERIENCE OF LEADING EMPLOYEES OF THE FIRM

(USE CONTINUATION SHEET IF REQUIRED)

SR. NO.	NAME OF PERSON	AGE	PROFESSIONAL EXPERIENCE DETAILS	POSITION HELD IN THE FIRM	SINCE WHEN
		QUALIFICATION			
1	2	3	4	5	6

--	--	--	--	--

NAME, SIGNATURE
& SEAL OF TENDERER :

DATE :

**MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT**

TENDER No. CE/36/2018

APPENDIX- VII

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

**EXECUTION OF SIMILAR WORK CARRIED OUT AS PRINCIPAL CONTRACTOR DURING
EACH OF LAST SEVEN YEARS.**

(Rs. in lakhs)

Sr. No.	Tender No.	Name of the work	Employer	Amount Received
				Rs.
1	2	3	4	5

NAME, SIGNATURE

& SEAL OF TENDERER :

DATE :

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36/2018

APPENDIX- VIII

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

**LIST OF MAJOR TOOLS, PLANT AND MACHINERY, SURVEY EQUIPMENTS,
TESTING APPARATUS IN WORKING CONDITION AND
OWNED BY THE TENDERER**

(USE CONTINUATION SHEET IF REQUIRED)

SR. NO	DESCRIPTION MAKE	NO. OF UNITS	YEAR OF PURCHASE	PRESENT CONDITION	PRESENT LOCATION
-------------------	----------------------------------	---------------------	-----------------------------	------------------------------	-----------------------------

CAPACITY

1

2

3

4

5

6

NAME, SIGNATURE

& SEAL OF TENDERER :

DATE :

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 36 /2018

APPENDIX- IX

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

DECLARATION FORM

Sr.	Description	Yes / No.
-----	-------------	-----------

No.		
1.	Agree to all terms and conditions of Tender and declare that no changes are made to the Port's original Tender Document	
2.	Have you ever been Black listed by any Government / PSU	

Firm's Sign and Seal

Place:

Date:

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e -TENDER No. CE/ 36/2018

APPENDIX- X

FORM OF AGREEMENT

THIS AGREEMENT made this _____ day of _____ two thousand Seventeen BETWEEN the Board of Trustees of the Port of Mormugao, a body corporate under the Major Port Trusts Act. 1963 (herein under referred to as "the Board" which expression shall unless repugnant to the context or meaning thereof mean and include their successors and assigns) of the ONE PART of M/s.

_____, having their

registered office at _____ (hereinafter referred to as “the contractor”, which expression shall unless repugnant to the context or meaning thereof, mean and include their heirs, executors, administrators, representatives and assignees or successors in office) of the OTHER PART.

WHEREAS the Board is desirous of executing the work of “ _____ ” on the terms and conditions stipulated in the contractor’s tender dated _____ and read with the conditions contained in the tender documents attached to the above mentioned tender.

AND WHEREAS the contractor by their above mentioned tender has offered to execute, complete and maintain such work, which tender has been accepted by the Board and such tender with correspondence, specifications, schedule. Amendments and acceptance thereof will constitute abiding contract between the Board and the contractor.

AND WHEREAS the contractor has furnished to the Board, a Bank Guarantee No. _____ dated _____ for a sum of Rs. _____ (Rupees _____ only) as Initial Security for the due performance and observance by the contractor of the terms and conditions of this Agreement.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the conditions of contract herein after referred to.
2. The following documents shall be deemed to form and be read and construed as part of this agreement.

(A) **COVER No. - I**

- i. Contents of Tender Document
- ii. Notice Inviting Online Tender
- iii. Instructions for Online submission and Instructions to Tenderers
- iv. Joint Venture and Joint Venture Partner Information Form
- v. Scope of Work
- vi. General Conditions and Technical Specifications
- vii. Additional Special Instructions
- viii. Special Conditions of Contract
- ix. Form of Tender
- x. APPENDIX – I to X
- xi. Form of Agreement

- xii. Proforma of Pre contract Integrity Pact
- xiii. Form of Bank Guarantee for EMD and Security Deposit
- xiv. Indicative Drawing
- xv. Booklet containing Instructions to tenderers, General and special conditions of contract. (VOLUME –I)

(B) **COVER No. II**

- i. Directions to Tenderers for filling in the Schedule of quantities & rates
- ii. Schedule of quantities and rates

All additional drawings. Specifications and written instructions when issued by or approved in writing by the Chief Engineer as per clause No.9 of the General Conditions.

THE COMMON SEAL OF THE TRUSTEES OF

THE PORT OF MORMUGAO HAS HEREUNTO
AFFIXED AND THE CHAIRMAN THEREOF CHIEF ENGINEER
HAS HEREUNTO SET HIS HAND IN THE
PRESENCE
OF 1.

2.

SIGNED AND SEALED BY THE
CONTRACTOR IN THE PRESENCE OF

1.

2.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/36 /2018

APPENDIX- XI

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

VENDOR REGISTRATION FORM

1. Name of the Organization :

2. Address (In Detail) : _____

3. Telephone Number : _____

4. E-Mail Id : _____

5. Permanent Account Number (PAN) : _____

6. Bank Name : _____

7. Bank Branch Address (In Detail) : _____

8. Bank Branch Code : _____

9. Bank Account Number : _____

10. Bank Account Type : _____

11. Magnetic Ink Character Recognizer (MICR) : _____

12. Tax Identification Number (TIN) : _____

13. GST Registration Number : _____

14. GST Registration Code : _____

15. CST Registration Number : _____

16. Employee Provident Fund (EPF) : _____
 Registration Number _____
17. EmployeeState Insurance Scheme : _____
 (ESIS) Registration Number _____

18. IFSC Code : _____

19. GST IN Registration Number : _____

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e - TENDER NO CE/36/ 2018
APPENDIX- XII

FORM OF BANK GUARANTEE FOR SECURITY DEPOSIT

In consideration of the Board of Trustees of Mormugao Port Trust (hereinafter called 'The Board') having offered to accept the terms and conditions of the proposed agreement between _____ and _____ (hereinafter called "The said Contractor(s)" for the work _____ (hereinafter called "The said Agreement") having agreed to production of an irrevocable

Bank _____ Guarantee _____ for _____ Rs. _____ (Rupees _____ only) as a security / guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions contained in the said agreement

1. We, _____ (indicate the name of the Bank) (hereinafter referred to as the "Bank") hereby undertake pay to the Board an amount not exceeding Rs. _____ (Rupees _____) on demand by the Board.
2. We, _____ Bank, do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Board stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor (s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).
3. We, the said Bank, further undertake to pay to the Board any money so demanded notwithstanding any dispute or disputes raised by the Contractor (s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under the bond shall be a valid discharge of our liability for payment there under, and the contractor (s) shall have no claim against us for making such payment.
4. We, the said Bank, further agree that the Guarantee herein contained shall remain in force and effect during the period that would be taken for the performance of the said agreement and it shall continue to be enforceable till all the dues of the Board under or by virtue of the said agreement have been fully paid, and its claims satisfied or discharged or till the Engineer-in-charge, on behalf of the Board certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s), and accordingly discharge this guarantee.
5. We _____ further agree with the Board that the Board shall have the fullest liberty without our consent, and without affecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said contractors(s) and to forbear or enforce any of the terms and conditions relating to the said agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Board or any indulgence by the Board to the said contractor(s) or by any such matter or thing

whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This Guarantee will not be discharged due to the change in the constitution of the bank or the contractor(s).
7. We _____ lastly undertake not to revoke the Guarantee except with the previous consent of the Board in writing.
8. This Guarantee shall be valid up to _____ unless extended on demand by the Board. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. _____ (Rupees _____ only), and unless a claim in writing is lodged with us within six months of the date of expiry or extended date of expiry of this Guarantee, all our liabilities under this Guarantee shall stand discharged,

Dated the _____ day of _____ for
_____ Bank.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 36 /2018

Name of Work: "Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8."

APPENDIX-XIII

PROFORMA OF PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on _____ day of the month of _____ 2018, between, on one hand, the Board of Trustees of Mormugao Port Trust acting through _____, (Chief Engineer)), Mormugao Port Trust (hereinafter called the 'EMPLOYER', which expression shall mean and include,

unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. _____ Represented by _____, Director, (hereinafter called the "BIDDER" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the 'EMPLOYER' has invited bids for the project of **“Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”** (Hereinafter referred to as the “Project”) and the BIDDER is submitting his bid for the project and WHEREAS the BIDDER is a Private Limited company/Public Limited company/Government undertaking/registered partnership firm/ constituted in accordance with the relevant law in the matter and the 'EMPLOYER' is Mormugao Port Trust.

NOW, THEREFORE, To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the EMPLOYER to obtain the desired said stores/equipment/ services/works at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortion impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the 'EMPLOYER' will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Commitments of the 'EMPLOYER'

- 1.1 The 'EMPLOYER' undertakes that no official of the 'EMPLOYER', connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 The 'EMPLOYER' will, during the pre-contract stage, treat all BIDDERS alike and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3 All the officials of the 'EMPLOYER' will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the 'EMPLOYER' with full and verifiable facts and the same is prima facie found to be correct by the 'EMPLOYER' necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the 'EMPLOYER' and such a person shall be debarred from further dealings related-to the contract process. In such a case while an enquiry is being conducted by the 'EMPLOYER' the proceedings under the contract would not be stalled.

3. Commitments of BIDDERS

- 3.0 The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

- 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the 'EMPLOYER' connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the 'EMPLOYER' or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.
- 3.3* BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 3.4* BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5* The BIDDER further confirms and declares to the 'EMPLOYER' that the BIDDER has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the EMPLOYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the 'EMPLOYER' or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the 'EMPLOYER' as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the 'EMPLOYER' or alternatively, if any relative of an officer of the 'EMPLOYER' has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender.
- The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the 'EMPLOYER'.

4. Previous Transgression

- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify bidder's exclusion from the tender process.
- 4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money (Security Deposit)

- 5.1 While submitting commercial bid, the BIDDER shall deposit an amount **Rs. 6,66,000/-** as Earnest Money/Security Deposit, with the 'EMPLOYER' through any of the following instruments:
- (i) Demand Draft in favour of FA & CAO , MPT Vasco or in the form of Bank Guarantee from an Indian Nationalised Bank/ Scheduled Bank having branch in Goa.
- 5.2 The Earnest Money/Security Deposit shall be valid up to a period of **Twenty Months** or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the EMPLOYER, including warranty period, whichever is later.
- 5.3 In case of the successful BIDDER, a clause would also be incorporated in the Article pertaining to Performance Security in the Project Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Security in case of a decision by the EMPLOYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.4 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.5 No interest shall be payable by the 'EMPLOYER' to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

6. Sanctions for Violations

- 6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the 'EMPLOYER' to take all or any one of the following actions, wherever required:-
- (i) To immediately call off the pre contract negotiations without assigning any

reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

(ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the 'EMPLOYER' and the 'EMPLOYER' shall not be required to assign any reason therefore.

(iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.

(iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing MCLR of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

(v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the EMPLOYER, along with interest.

(vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall, be liable to pay compensation for any loss or damage to the 'EMPLOYER' resulting from such cancellation/rescission and the 'EMPLOYER' shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

(vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the 'EMPLOYER' or take action as per the procedure mentioned in the "Guidelines on Banning of Business dealings." Copy of the Guidelines on Banning of business dealings" is annexed and marked as Annexure.

(viii) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the EMPLOYER with the BIDDER, the same shall not be opened.

(ix) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.

(x) Forfeiture of Performance Guarantee in case of a decision by the 'EMPLOYER' to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

- 6.2 The 'EMPLOYER' will be entitled to take all or any of the actions mentioned at para 6.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3 The decision of the 'EMPLOYER' to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. Failure Clause

- 7.1 The BIDDER undertakes that it has not performed/is not performing similar project at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar project was performed by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the 'EMPLOYER', if the contract has already been concluded.

8. Independent Monitors

- 8.1 The 'EMPLOYER' has appointed the following Independent Monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission.
- 8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

- 8.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/bidding, including minutes of meetings.
- 8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the EMPLOYER,
- 8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the EMPLOYER, including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 12.1 The EMPLOYER, 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 parties. The parties will offer to the Monitor the option to participate in such meetings.
- 12.2 The Monitor will submit a written report to the designated Authority of EMPLOYER within 8 to 10 weeks from the date of reference or intimation to him by the EMPLOYER/ BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this pact or payment of commission, the EMPLOYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder and the Bidder shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

10. Law and Place of Jurisdiction

This Pact is subject to Indian Law.' The place of performance and jurisdiction is the seat of the EMPLOYER

11. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

13. Validity

12.1 The validity of this Integrity Pact shall be from date of its signing and extend up to 5 years or the complete execution of the contract to the satisfaction of both the EMPLOYER and the BIDDER, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

12.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12.3 If the BIDDER is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

13. The parties hereby sign this Integrity Pact at _____ on _____ 2018

EMPLOYER

BIDDER.

Name of the Officer.

CHIEF EXECUTIVE OFFICER

Designation

Deptt./MINISTRY/PSU

Witness

Witness

1. _____

1. _____

2. _____

2. _____,

* Provisions of these clauses would need to be amended/ deleted in line with the policy of the EMPLOYER in regard to involvement of Indian agents of foreign bidders.



MORMUGAO PORT TRUST
ENGINEERING CIVIL DEPARTMENT

e-TENDER No. CE/36/2018

e- TENDER FOR

(Cover No: 2)

“Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”

<https://eprocure.gov.in/eprocure/app>



An ISO 9001 : 2015 Port
ISPS CODE Compliant

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e - TENDER NO: CE/36/2018

“FINANCIAL BID”

(BOQ)

FOR

“Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”

”

Further details <https://eprocure.gov.in/eprocure/app>

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

E-TENDER No. CE/36/2018

e-tender for “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No.8.”

COVER NO. 2 (FINANCIAL BID)

1. Directions to Tenderers for filling in the Schedule of quantities & rates
2. Schedule of Quantities & Rates

MORMUGAO PORT TRUST,
ENGINEERING CIVIL DEPARTMENT,
MAIN ADMINISTRATIVE OFFICE BLDG,
HEADLAND, SADA, GOA.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER NO. CE/36/2018

e-tender for “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No.8.”

DIRECTIONS TO TENDERERS FOR FILLING THE SCHEDULE OF QUANTITIES & RATES.

1. Tenderers are required to fill in their PERCENTAGE rate in the Price in the space provided for the purpose and unless this is done, their tender will not be considered. Only one percentage rate on all Rates of Schedule of Quantities & Rates shall be named.
2. The Amount / Rate inserted shall hold good for all works under this contract, without reference to quantity or location of the work or the variation in the estimated quantity.
3. Quantity of item of work mentioned in the Schedule should be noted and the rate worked out carefully, having regard to the specifications before submitting the tender, as no variation in rates etc. will be allowed on any ground such as mistake or misunderstanding etc. after the tender has been submitted. The amount / rate quoted at the end of the Schedule of Quantities & Rates, will apply to all the items of work involved in execution of the subject tender and any excess in the item that may be directed to be executed by the Chief Engineer.
4. Tenderers are requested to note that they are required to add or deduct the amount due to this percentage, as the case may be and work out the final figures (amount of their tenders), at the end of the Schedule of Quantities & Rates.
5. The tender value shall be rounded off to the nearest rupee.
6. In the event there is variation in specification of drawing, bill of quantities and general specification the bill of quantities will prevail.
7. **The bidder shall quote the price exclusive of GST. Applicable GST shall be paid extra on the quoted price.**
8. The Contractor shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management, execution and safety practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods.
9. The work description against each are not exhaustive in themselves and be deemed to include all the necessary and ancillary works involved for successful completion of that item and the entire works.

Chief Engineer

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER NO. **CE/36/2018**.

e-tender for “Paving of Platform Along Side of 2nd Full Rake Wagon Handling Line No. 8.”

PRICE SCHEDULE (BILL OF QUANTITIES)

Item No	Description of work	Unit of Qty.	Qty.	Rate		Total Amount
				Per	At	
					Rs. p	Rs. p
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Excavation in dense soil/murum/interspersed with boulders etc. including removal of obstructions such as small trees, vegetation etc. and removal of excavated material upto a lead of 100m and a lift of 1.5m including refilling foundation trenches with suitable excavated materials , including rolling with Vibratory roller 80-100KN static weight wherever required and as directed by the Chief Engineer or his representative. Excavation shall be carried out using suitable Earth moving machinery and necessary logistic systems etc. All tools, plants, labour and material etc. complete	Cubic Metre	3500.00	Cubic Metre	160.96	563360.00
2.	Earth Filling with murum or other approved earth brought from outside, in layers of 20 cm (8") and consolidating and watering copiously, rolling with vibratory roller of 80-100 KN static weight etc complete. All tools, plant ,labour and material etc. complete.	Cubic Mere	2100.00	Cubic Metre	892.87	1875027.00

3	Earth Filling with available earth at site or supplied by department, in layers of 20 cm (8") and consolidating and watering copiously, rolling with vibratory roller of 80-100 KN static weight etc complete. All tools, plant ,labour and material etc. complete.	Cubic Metre	3150.00	Cubic Metre	209.03	658444.50
4	Providing and laying Soling with hard laterite rubble stone of 10 cm to 15 cm size in drains and cable trenches, including hand packing, consolidating, watering ,ramming etc. complete. All labour tools, plant & material etc. complete.	Cubic Metre	312.00	Cubic Metre	1204.73	375875.76
5	Providing and laying Granular Sub-Base of 25cm thick with basaltic stones of Grading III as per Section 401 and its subsections of "Specifications for Road and Bridge works (MORTH) published by IRC (Latest Edition), in two layers including spreading, watering and consolidating with vibratory road rollers of 80-100 KN static weight etc. complete and as directed by Chief Engineer or his representative. All tools, plant,labour and material, etc. complete .(Note: Follow Technical Specifications in Section 401 and its subsections)	Cubic Metre	5512.00	Cubic Metre	1965.92	10836151.04

6	<p>Providing and laying Wet Mix Macadam , 15cm thick ,using basaltic stones as per Sec 406 "Specifications for Road and Bridge works (MORTH) published by IRC (Latest Edition), including spreading, packing, consolidating to required camber and gradient by rolling with vibratory roller of 80-100 KN static weight, compacting to the required density, etc. complete and as directed by the Chief Engineer or his representative All tools, plant,labour and material, etc. complete (Note: Follow Technical Specifications in Sections 406 and its sub sections.)</p>	Cubic Metre	3276.00	Cubic Metre	2331.23	7637109.48
7	<p>Providing and laying Dry Lean Cement Concrete, 7.5 cm using black trap stone metal aggregates as per Section 601 "Specifications for Road and Bridge works (MORTH) published by IRC (Latest Edition), including mixing, laying, consolidating to required camber and gradient by rolling with vibratory roller of 80-100 KN static weight, compacting to the required density, etc. complete and as directed by the Chief Engineer or his representative All tools, plant, labour and material, etc. complete Note: Follow Technical Specifications in Section 601 and its subsections)</p>	Cubic Metre	1638.00	Cubic Metre	5263.68	8621907.84

8	<p>Providing and laying 100 mm thick interlocking concrete paving blocks (Heavy duty) of M50 grade of approved make, pattern, colour, laying over a bed of coarse natural sand or crushed quarry fines (as per technical specifications) for thickness of 40-60 mm average thickness, to required slope and level, including chipping /excavating the undulated surface, joint filling with fines/ sand and compacting with heavy duty vibrator/ plate compactor etc. complete as per specification, including providing equivalent grade of concrete for filling gaps at edges/corners, cleaning the surfaces, etc. as directed by the Chief Engineer or his representative .(Rate shall include cost of manufacturing, transporting, loading & unloading, laying, all leads & lifts, equipments, testing etc. complete.) All tools, plant, materials and labour etc. complete. Follow relevant IRC SP:63 (latest revision)</p>	Square Metre	21840.00	Square Metre	1116.94	24393969.60
9	<p>Providing and laying Plain Cement concrete of M15 grade with Ready Mixed Concrete (RMC) using 20 mm graded black trap stone metal out of quarried boulders as coarse aggregate including mixing, depositing, consolidating, levelling, curing etc. complete. All, tools, plant, labour and material etc. complete.(Follow Technical Specification of MORTH)</p>	Cubic Metre	312.00	Cubic Metre	6519.87	2034199.44
10	<p>Providing and laying R.C.C. M25 grade with Ready Mixed Concrete (RMC) using 20 mm graded black trap stone metal out of quarried boulders as coarse aggregate in RCC drains/trenches, etc. of any</p>					

	size and shape including mixing, placing, consolidating, vibrating, leveling, curing etc. but excluding the cost of shuttering and reinforcement. All tools, plant, labour & material etc. complete. (Follow Technical Specification of MORTH)	Cubic Metre	478.00	Cubic Metre	7242.53	3461929.34
11	Providing and fixing reinforcement in drains /trenches with Fe500 Tor steel conforming to IS:1786 or equivalent including cutting, bending, tying grills, placing in position, holding in position during concreting , ready made cover blocks of required sizes etc. as directed by Chief Engineer or his representative including cost of binding wire. All tools, plant, labour and material, etc. complete	Kilogram	43160.00	Kilogram	66.82	2883951.20
12	Providing & fixing shuttering for the slab/walls/ cast in situ slab bottom , of Drains/Trenches, etc. of any size and shape including cleaning, oiling, closing, gaps, removing shuttering after concreting, provisions of necessary props, bracings and other supports etc. All labour, tools, and material etc. complete.	Square Metre	4160.00	Square Metre	336.54	1400006.40
13	Providing and placing in position RCC M30 grade factory made Precast Drain /Cable Trench cover slabs of size 60cmx45cmx20cm (With Prior approval of department) , including providing reinforcement as per attached drawing, transporting to site , loading/unloading, placing etc. complete. . All tools, plant, materials and labour etc. complete.	Number	1934	Number	536.52	1037629.68

14	Demolishing and clearing of Cement concrete in trap stone metal, disposal of unserviceable material within a lead of 100m including all tools & plant, labour and material complete	Cubic Metre	15.00	Cubic Metre	2918.51	43777.65
15	Demolishing RCC work in trap stone metal including cutting of reinforcement steel, stacking of seviceable material and disposal of unserviceable material within a lead Of 100m including all tools & plant , labour, material etc. complete.	Cubic Metre	200.00	Cubic Metre	858.43	171686.00



Part B- Earthwork using heavy machinery

Item No	Description of work	Unit of Qty.	Qty.	Rate		Total Amount
				Per	At	
					Rs. p	Rs. p
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Hiring Charges of Back hoe Excavator Machine with breaker attachment(JCB or equivalent) for carrying out excavation in dense hard soil/murum/ cargo dumps, boulders, concrete etc. at places directed in Dock area and Headland Sada area, including excavating, loading, levelling, grading etc complete. The charges to include cost of fuel, consumables, lubricants, operator & cleaner charges. All tools, plant , labour and materials etc complete.	Day	30	Day	8400.00	252000.00

2	Hiring Charges of Tipper Truck of minimum 6 M3 capacity, for transporting of available excavated earth/ cargo dumps , inside Dock area and from Headland Sada area, as directed by Chief Engineer or representative . The charges to include cost of fuel, consumables, lubricants, driver & cleaner charges. All tools, plant , labour and materials etc complete.	Day	60	Day	5250.00	315000.00
3	Hiring Charges of Vibratory Road Roller , 80-100 KN static weight for rolling on filled embankments, excavated areas etc as directed by Chief Engineer or representative . The charges to include cost of fuel, consumables, lubricants, driver & cleaner charges. All tools, plant , labour and materials etc complete.	Day	5	Day	8925.00	44625.00

	TOTAL AMOUNT OF TENDER (EXCLUDING GST) ESTIMATEED AMOUNT		Rs.66606649.93
	I hereby agree to execute the work at	_____ %	Above / below the estimated cost put to Tender
	Name of the Contractor		
	Quoted Amount		
	Difference Amount		

(Tender Amount in Words

Rupees _____

_only)

TENDERER'S NAME & SIGN WITH SEAL

Place :

Date:

Note: The offered rates shall be inclusive of all taxes and duties(excluding applicable GST) , GST shall be extra as applicable. If new tax is imposed by Central/State Govt, the same will be reimbursed on submission of documentary evidence. ***Bidder to specify tax component separately.***