इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि.
(भारत सरकार का उद्यम)
ENGINEERING PROJECTS (INDIA) LTD.
(A Government of India Enterprise)

AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

NIT No: PCO/BBSR/933/155

FOR

Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

EXECUTING AGENCY

Engineering Projects (India) Limited

PCO, Bhubaneswar - Odisha

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TENDER DOCUMENT

NIT No: PCO/BBSR/933/155

FOR

Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

VOLUME – I

NIT, Addendum To Instructions To Tenderers, Special Instructions To Bidders For E-Tendering, Letter of Undertaking, Form of Tender, Memorandum, Bidder Information, Annexures,
ACC, GCC & Appendix 1 & 2

ENGINEERING PROJECTS (INDIA) LTD.
(A. Govt. of India Enterprise)
PCO-Bhubaneswar

NIT No: PCO/BBSR/933/155 **Dt.12.01.2024**

NOTICE INVITING e- TENDER (NIT)

Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

Engineering Projects (India) Ltd., invites the online **open** e-Tenders on **Item Rate Basis** from the eligible contractors/firms who fulfil the eligibility criteria as per the brief particulars of scope for "**Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.**" in two bid system (Techno-commercial bid & Price Bid) for the following works:

Sl. No.	Description of work	Tentative Estimated Cost (Excluding GST)	Period of Completion	EMD (Rs.)	Tender Fee (Rs.)
1.	**Supply, Fabrication and Painting (Sand Blasting with Two coats of Primer) of Structure of Conveyors Conveyor Gallery, Trestles, Transfer houses Quantity: 1100 MT**	**04 months from Contractual Commencement date**	**Rs. 9,44,46,000/-**	**Rs. 18,88,920.00**	**Rs. 11,800/- (Rupees Eleven Thousand Eight Hundred Only)**

Scope of Work:
The brief scope of work shall include but not limited to Supply, fabrication and painting of **Conveyor Gallery, Trestles, Transfer houses** as per detailed technical specification and drawings and BOQ.

Time schedule of Tender activities:

(i) Start Date & Time for Downloading of tender documents: **from 15.01.2024, 06.55 PM**
(ii) Last Date of Receiving Queries - Bidders are requested to send their queries after visiting the site through email upto 07 days prior to due date of submission of tender and reply will be given accordingly.
(iii) Last Date & Time of submission of Tender (online): **up to 05.02.2024, 03.00 PM**
(iv) Date & Time of online opening of tender (Techno-Commercial Bid) : **at 06.02.2024 03.00 PM**

Sign and Stamp of Bidder Sign and Stamp of EPIL

2.0 Qualification Criteria:

Contractors/Bidders who fulfill the following requirements are eligible to participate in this tender. **The joint ventures/Consortium is not accepted.**

a) The bidders must have experience of having successfully completed following similar works during the last seven (7) years ending last day of the month previous to the one in which applications invited should be either of the following:

Three similar works, each costing not less than the amount equal to **FORTY PERCENT (20%)** of estimated cost put to tender

OR

Two similar works, each costing not less than the amount equal to **SIXTY PERCENT (25%)** of estimated cost put to tender

OR

One similar work of aggregate cost not less than the amount equal to **EIGHTY PERCENT (40%)** of estimated cost put to tender

The "similar works" shall mean Supply, fabrication of structural steel for Plant Buildings/ conveyer galleries in any industry.

Note- Bidder shall submit copies of Completion certificates along with LOA / LOI, Contract agreement clearly mentioning the detail scope of work, value of work, date of start, time period as per LOI and actual date of completion and actual value of work completed. The experience certificate in this regard should be issued by officer not below the rank of Executive Engineer / Project Manager / Unit Officer. In case of experience certificate issued by private firm it should be supported with Form 26AS duly certified by CA certificate.

(i) For evaluation purpose, the completion cost of works mentioned in the Completion Certificate shall be enhanced by Seven Percent (7%) per annum till the end of month prior to date of NIT.

(ii) The cost of free issue materials shall not be included in the completion cost of works.

(iii) The experience certificates issued by any Government Organizations / Semi Government Organizations / Autonomous Bodies / Municipal Bodies / Public Limited Companies listed on BSE / NSE and private party shall be accepted for assessing the eligibility of the tenderer. In case of private party Income Tax Return File is to be submitted. However, the completion certificates issued must be supported by work order/Agreement & completion certificates.

b) Should have average annual financial turnover on works amounting at least 50% of the estimated cost of the work during the last three consecutive financial years ending on 31.03.2023. Turnover certificate duly certified by a Chartered Accountant along with UDIN issued by ICAI is also to be submitted.

c) Should not have incurred any losses in more than two years during the immediate last five consecutive financial years, ending 31.03.2023, Copies of Annual report/balance

sheet and a No loss Certificate duly certified by a Chartered Accountant along with UDIN issued by ICAI is also to be submitted.

d) Should have a Banker's Certificate from a Nationalized/Schedule Bank of the amount equal to 40% of the Estimated Cost put to tender (ECPT). The Banker's Certificate or should not have been issued earlier than Three (03) Months of last date of submission of tender.

OR

Net Worth Certificate of minimum 10% of the estimated cost put to tender issued by certified Chartered Accountant with Unique Document Identification Number (UDIN). The Net Worth certificate shall be of the last financial year ending on 31st March 2023.

The Banker's Certificate & Net Worth Certificate shall be in the format prescribed in Annexure-F.

e**)** Bidder has to submit undertaking regarding details of Constitution of firm/Company along with the details of its Directors as per enclosed Annexure-C. In case the bidder fails to submit Constitution of firms with the bid along with the details of its firm Directors as per Annexure-C their bid will be rejected.

f) Notwithstanding anything stated in tender, EPI reserves the right to assess the capabilities and capacity of the tenderer to perform the contract, in the overall interest of EPl. In case, tenderer's capabilities and capacities are not found satisfactory, EPI reserves the right to reject the tender the credentials of the Bidders with respect to Technical & Financial criteria shall be verified and inspection of the works, if required, to be carried out by EPI. If not found satisfactory by EPI, their bid will be considered non-responsive and rejected.

g) The Bidder should not have been currently (till the last date of bid submission of the tender or till the last date of extended tender) blacklisted or debarred in any State Govt./Municipal Corporations/Central Govt./any State Govt. Organizations, Urban Local Body and/or its Undertaking company. Bidder has to submit a notarized self-declaration with the bid in respect of the same that **"(……Agency Name…) has not been currently (till the last date of bid submission of the tender or till the last date of extended tender) debarred/ black listed/banned/suspended/ declared ineligible by any of its client/ in any State Govt. /Municipal Corporations/ Central Govt. / any State Govt. Organizations, Urban Local Body and/or its Undertaking company for poor performance, unprofessional/ slow work leading to cancellation of work"**.

2.1 Evaluation of the bidders:

Evaluation of the bidders shall be subject to through verification of their documents related with credentials and BG and inspection of similar works carried out / in progress by them, through a Technical Committee of experts to be constituted by EPIL. Price bids of all eligible bidders will be opened only after receiving the confirmations of Credentials & BG from the concerned Department/Bank.

3.0 **Tender documents comprising of the following are available on the website of EPI: www.epi.gov.in & CPP Portal: www.etenders.gov.in**

(i) Notice Inviting Tender, Addendum to Instructions to Tenderers, Special instructions to Bidders for e-Tendering, Letter of Undertaking, Form of tender, Memorandum, Bidder Information, Affidavit for NIT (Annexure-A), Letter of Undertaking for Constitution of Firm (Annexure-C), Declaration for local content (Annexure-D), BG format for Security Deposit (Annexure-E), Net worth certificate or Banker's Certificate Format (Annexure-F). (Vol-I)

(ii) Additional Conditions of Contract, General Conditions of Contract, Technical Specifications with Scope of Work and Drawings (Vol-II)

(iii) Price Bid & Bill of Quantities - (Vol-III)

4.0 An attested copy of power of attorney/affidavit/Board. Resolution executed as under shall accompany the 'Tender Documents'

a) In case of Sole Proprietorship, an affidavit of Sole Proprietorship and if the tender is signed by any other person Power of Attorney by the Sole Proprietor in favour of signatory.
b) In case of Partnership, if document is not signed by all the partners, Power of Attorney in favour of the Partner/person signing the documents authorizing him to sign the documents. The person signing the documents should also have a specific authority to refer disputes with the partnership firm to arbitration.
c) In case of Company, copy of the Board Resolution authorizing the signatory to sign on behalf of the Company.

The tenderer shall furnish the name (s) and designation of relative (s) if any, employed by EPI.

5.0 In order to participate, the bidder should have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities. Interested bidders have to necessarily register themselves on the portal https://etenders.gov.in/eprocure/app to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get them registered at the aforesaid portal for which they are required to contact

For any technical related queries please call at 24 x 7 Help Desk Number
0120-4001 002 , 0120-4001 005 , 0120-6277 787
International Bidders are requested to prefix +91 as country code
Technical - support-eproc@nic.in
Policy Related - cppp-doe@nic.in

They may obtain further information regarding this tender from **Deputy General Manager (T)** at the address given at **Clause No. 24.0** below from 10:00 hours to 17:00 hours on all working days till the last date of online submission of Bidding Documents. **No special character like! @, #, $, %, &, *, _ to be include while saving the file/uploading.**

For proper uploading of the bids on the portal namely https://etenders.gov.in/eprocure/app (hereinafter referred to as the 'portal'), it shall be the sole responsibility of the bidders to

apprise themselves adequately regarding all the relevant procedures and provisions as detailed at the portal as well as by contacting M/s CPPP., directly, as and when required, for which contact details are mentioned above. The EPI in no case shall be responsible for any issues related to timely or properly uploading/submission of the bid in accordance with the relevant provisions of Section Instruction to Bidders of the Bidding Documents.

6.0 Bidders can download the bid document from the portal without registering or paying document fees in advance, any time from 18:55 Hrs. on **15.01.2024**; However interested bidders have to pay tender fees for participating in the tendering and submitting the bid. For this purpose the interested bidders shall be required to **pay Rs. 10,000.00 (Rupees Ten Thousand) plus GST @ 18% i.e. Rs. 11,800/-** as non-refundable document fees and The bidders have to submit, the scanned copy of Tender fee receipt after depositing the tender fee online in EPI's Bank Account (as mentioned Below) along with the online bid.

Indian Overseas Bank:
Name of Branch: IOB, Sahid Nagar
IFSC Code: IOBA0000873
Name of A/c Holder: EPI LTD
A/C Number: 087302000001168
Account Type: Current

It is to be noted that, if the offer is received without requisite Tender Fee/ EMD the Bid will be rejected.

7.0 E-Bids must be submitted/uploaded along with scanned copies of relevant documents pertaining to **Clause no. 2.0 & Clause no. 23.0** under Single Stage Two Envelope Bidding Procedure on the CPP portal on or before last date and time of online bid submission. Late bids will not be accepted. Under the above procedure, only the first envelope (Technical Part) shall be opened in the presence of the bidders' representatives who choose to attend in person at the address given below on schedule date and time of bid opening or may be viewed by the bidders by logging in to the portal as per features available to them. Second envelope i.e. Price part shall be opened of technically qualified bidders.

The bid must be accompanied by an Earnest Money Deposit (EMD) of Rs. 18,88,920/- (Rupees Eighteen Lakhs Eighty eight Thousand Nine Hundred Twenty Only). This can be either in the form of Insurance Surety Bond or Account Payee Demand Draft or Fixed Deposit Receipt or Banker's cheque or Bank Guarantee of any Nationalized Bank/Scheduled Bank/Commercial bank as per the enclosed format or payment online in an acceptable form for the full amount of EMD payable favouring "Engineering Projects (India) Limited" payable at Bhubaneswar. The EMD shall be valid for minimum period of 150 days (One hundred fifty) from the last day of submission of tender. The earnest money (if any) will be forfeited without any prejudice to any right or remedy, in case the Bidder withdraws his offer(s) during the validity period or in case he changes his offer to his benefits, which are not acceptable to EPI. If the bidder is submitted a scanned copy of EMD, then Physical submission of Original EMD is to be submitted by lowest bidder before award of LOI/LOA of successful bidder.

The validity of offer(s) submitted by Tenderer shall be ninety (90) days from the last date of submission of the Tender. The validity period may be extended on mutual consent.

Note: BG should be submitted with Structured Finance Managing System (SFMS) issued by beneficiary bank.

7.1 Return of EMD

"The earnest money given by all the bidders except the lowest bidder should be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation."

8.0 The Terms & Conditions contained in this NIT and tender documents shall be applicable. In case of any unscheduled holiday falling on the last day of submission of tender, the next working day will be treated as scheduled day and time for submission of Tender.

9.0 The rates quoted by the bidder shall be firm and fixed for the entire period of completion and till handing over of the work. No revision to rates or any escalation shall be allowed on account of any increase in prices of materials, labour, POL and Overheads etc during the entire contract period or extended contract period.

10.0 The corrigendum or addendum, extension, cancellation of this NIT, if any, shall be hosted on the EPI's website/CPP portal portal https://etenders.gov.in/eprocure/app the bidders are required to check these websites regularly for this purpose, to take into account before uploading/submission of tender**. All Corrigendum and addendum are to be uploaded duly signed & stamped with tender documents as bid Annexure.**

11.0 The price bid of those bidders whose bid has been technically accepted on the basis of documents submitted and confirmations of Credentials & BGs are received from the concerned department/bank shall be opened with prior intimation to them. The offer of the L-1 bidders shall be accepted subject to the confirmation of authenticity of the PQ documents/BG from the concerned department/bank.

12.0 EPI reserves the right to extend the date of submission of the tender or cancel the tender or accept any tender or reject any or all tenders or split the work of tender or annul this tendering process without assigning any reason and liability whatsoever and to re-invite tender at its sole discretion even if an applicant may satisfy eligibility criteria.

13.0 **a)** In case of tie-tender, where two firms are bidding lowest, EPI reserves the right to split the work among these bidders and / or EPI will reserve the right to award the tender to any one of such bidder.
b) EPI reserves the right to delete any item while awarding the work.

14.0 Bidders to use as much as possible the material / services from MSME. Contractors to use as much as possible, the material/service from MSEs & Local suppliers/Manufacturers for promotion of Make in India. For Promotion of Public Procurement (Preference to Make In India) order 2017 (amended on 28.05.2018) GOI Guideline for procurement, the equivalent Indian makes of materials conforming to requisite quality in addition to List of Makes/Brands may be considered subject to approval of Client/Engineer.

All the bidders (Class –I local supplier, Class-II local Supplier, Non-Local Supplier) shall provide the percentage of local content in their bid as per Annexure-D irrespective of whether they are availing or not availing purchase preference under public procurement (Preference to Make in India) Policy.

15.0 In case of any discrepancy between the downloaded tender documents from the website and the uploaded copy by the tenderer, the tender documents appearing in the website being uploaded by EPI with the tender shall hold good for contractual as well as legal purposes. The tenderer shall furnish a **declaration** to this effect that "**no addition/deletion/corrections have been made in the downloaded tender document being uploaded by him and it is identical to the tender document appearing on the Website. In case of any discrepancy between the downloaded tender documents from the website and the uploaded copy by me/us, the tender documents appearing in the website being uploaded by EPI with the tender shall hold good for contractual as well as legal purposes".**

16.0 All prospective MSME bidders are requested to get themselves registered on TReDS platform (www.rxil.in) to avail payment benefits.

17.0 The tenderer must carefully inspect and examine the site and its surrounding and completely satisfy himself before submitting tender as to the nature of the ground, form and the nature of the site, over ground or underground utilities or services which may hinder the progress, means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information to risks, contingencies and other circumstances which may influence or effect the tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and also of the conditions and specifications. The bidder shall submit **Site visit declaration (Annexure –B)** for the same.

18.0 Bidder must submit documentary evidence of having formally certified skilled workforce or commitment by the bidders/ service providers to the effect that they would ensure that all their workers would be skilled through Recognition of Prior Learning (RPL) within two months from the date of commencement of work under the project, at the cost of service provider/vendor. In case, If the bidder doesn't have certificate skilled workforce through **Recognition of Prior Learning (RPL)** till last date of submission of bid then at the time of submission of tender the bidder should submit self-certified Undertaking that bidder shall provide the skilled workers through Recognition of Prior Learning (RPL) within two months from the date of commencement of work under the project.

19.0 In the event of award of work, the successful tenderer must furnish Security Deposit/all Guarantees (wherever applicable) as specified in 'Tender Documents' within the time specified in the letter communicating acceptance of his offer failing which the Earnest Money Deposit will be forfeited.

20.0 Submission of a tender by the tenderer implies that he has read the complete contract documents and has made himself aware of the scope, terms & condition and specifications of the work to be done and of conditions at which stores, tools, plant etc. will be issued to him by EPI, if any, local conditions and political situations and other factors having bearing

on the execution of the works. No claim of contractor whatsoever, within the purview of this clause, shall be entertained at any stage of the project.

21.0 Bidder has to upload all the relevant certificates regarding PQ criteria (Clause 2.0) and Clause 20.0 for qualifications with the tender, only uploaded documents will be considered for qualification.

22.0 Disqualification

The tenderers may note that they are liable to be disqualified and not considered for the opening of Price Bid if;

a) Non-Submission of Tender Fee and EMD as per NIT Condition.

b) Representation in the forms, statements and attachments submitted in the pre-qualification document are proved to be incorrect, false and misleading.

c) EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the Bidder in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Bidders.

d) If bidder have submitted incompletely filled in formats without attaching certified supporting documents and credentials to establish their eligibility to participate in the Tender.

e) If the tenderers attempt to influence any member of the committee. EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the contractor in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Tenderers.

f) If documents are not uploaded by the bidder as per instructions/due to special characters while saving files the files are unable to download the bids will be disqualified.

g) The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in the rejection of its bid.

h) In case of existing contractors of EPI, if progress is not satisfactory in any of the project their bid will be rejected.

i) The credentials of the Bidders with respect to Technical & Financial criteria shall be verified and inspection of the works, if required, to be carried out by EPI. If not found satisfactory by EPI, their bid will be considered non-responsive and rejected.

j) Currently (till the last date of bid submission of the tender or till the last date of extended tender) they have record of poor performance such as abandoning the work, rescinding of

contract for which the reasons are attributable to the non-performance of the contract, inordinate delay in completion, consistent history of litigation / arbitration awarded against the contractor or any of its constituents or financial failures due to bankruptcy etc. in their on-going / past projects.

Note: If any tenderer withdraws his tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or makes any modifications in the terms and conditions of the downloaded tender which are not acceptable to the EPIL, then the EPIL shall, without prejudice to any other right or remedy, be at liberty to forfeit entire amount of Earnest Money as aforesaid.

23.0 Bidder shall submit the following documents duly signed with date and stamped a part of Technical bid online. Only Online mode will be accepted for tender submission. No documents are required to be submitted offline by the bidders. Bidder has to upload all the relevant certificates regarding PQ criteria (Clause 2.0) and Clause 23.0 for qualifications with the tender, only uploaded documents will be considered for qualification.

a) Documentary evidence with regard to tender fees and EMD payment (In case bidder has submitted BG for EMD, a copy of SFMS shall also be submitted along with BG as per Clause no. 7.0).
b) Notarized Power of Attorney.
c) Affidavit of NIT (Annexure-A).
d) Undertaking regarding Constitution of Firm/Company (Annexure-C)
e) Covering letter for participation in Bid with Bid name, number with All Corrigendum and addendum (if any).
f) Details of similar works executed along with completion certificate & copy of Work order for qualification as per PQ criteria.
g) List of works executed during the last 5 years indicating name of the Client, value, date of start and completion date.
h) List of works under execution indicating name of the Client, Total Contract Value, Value of balance work in hand, date of start and completion.
i) CA certified Annual Reports including Audited balance sheets, Financial Turnover and profit and loss accounts along with schedules for the last 5 years upto 31.03.2023 with UDIN issued by ICAI is to be submitted.
j) Local Supplier Content certificate (Annexure-D)
k) Copy of Banker's Certificate or Net Worth Certificate as per format.
l) Declaration in Letter Head in accordance to Clause no. 15.0 of this NIT for no addition/deletion/ corrections in the downloaded tender document.
m) A notarized self-certification by bidder in accordance to Clause no. 2.0 (g) of this NIT for not blacklisted/debarred & reprimanded.
n) Form of Tender and Letter of Undertaking
o) Registration Certificate/Memorandum and Articles of Association/ Partnership Deed /Affidavit as proof of the organization set up.
p) Details of manpower and equipment/plant machinery available with Bidder.
q) Copy of valid PF Registration No.
r) Memorandum and Bidder Information with banker details as per the format
s) Copy of PAN Card and GST Registration Certificate

24.0 Bidders may obtain further information regarding this tender at the address given below from 10:00 hours to 17:00 hours on all working days till the last date of online submission of Bidding Documents.

Deputy General Manager (T)
(Contracts Division)
Engineering Projects (India) Ltd. (PCO, Bhubaneswar)
3rd Floor, Plot no. 108,
Unit-7, Surya nagar,
Bhubaneswar – 751003,
ODISHA
E-mail : epil.bbsr@epi.gov.in

25.0 **Only Online mode will be accepted for tender submission.** The bidders have to submit, the scanned copy of Tender fee receipt after depositing the tender fee online in EPI's Bank Account along with the online bid. Also, the scanned copy of Bid Security (EMD) as mentioned in the NIT (Insurance Surety Bond, Bank Guarantee, DD, Bankers Cheque etc) shall be submitted by the bidders with their online bid. However, the original of the same shall be submitted by the bidder at the later stage as and when required by EPI.

26.0 Post tender clarification shall be governed as per clause no. 79.0 of GCC. However, no clarification will sought in case of non-submission of Tender Fee and Bid Security /EMD of requisite amount or unconditional letter of acceptance or Affidavit for correctness of document/information or Power of Attorney or Net worth/banker's certificate as per format. In such case the bidder shall be rejected summarily without seeking any further clarification/documents.

27.0 Contact details for site releated Queries / Visit:

Sh.Prashant T Wasnik, GM (Tech.)
Project In Charge -MCL Project
Engineering Projects (I) Limited,
Email : pt.wasnik@epi.gov.in
Ph.-7770822444

Sh. Dheeranjan Mohanty,
DGM (Tech),
Engineering Projects (I) Limited,
Email id: dheeranjan.m@epi.gov.in

For more information on EPI, visit our website at: http://www.epi.gov.in
For more information on the e-tender visit website https://etenders.gov.in/eprocure/app

****

Sign and Stamp of Bidder Sign and Stamp of EPIL

Annexure - A

AFFIDAVIT
(To be submitted by bidder on non-judicial stamp paper of Rs.100/-(Rupees Hundred only) duly attested by Notary Public)

Affidavit of Mr ---------- So ---------- R/o ----------.

I, the deponent above named do hereby solemnly affirm and declare as under :

1. That I am the Proprietor/Authorized signatory of M/s ……having its Head / Regd. Office at……..

2. That the information / documents/Experience certificates submitted by M/s …… along with the tender for …….. (Name of work)…. To EPI are genuine, true and nothing has been concealed.

3. I shall have no objection in case EPI verifies them from issuing authority (ies). I shall also have no objection in providing the original copy of the document (s), in case EPI demand so for verification.

4. I hereby confirm that in case, any document, information & / or certificate submitted by me found to be incorrect / false / fabricated, EPI at its discretion may disqualify /reject/ terminate the bid / contract and also forfeit the EMD / All dues.

5. I shall have no objection in case EPI verifies any or all Bank Guarantee(s) under any of the clause (s) of Contract including those issued towards EMD and Performance Guarantee from the Zonal Branch / office issuing Bank and I / we shall have no right or claim on my submitted EMD before EPI receives said verification.

6. That the Bank Guarantee issued against the EMD issued by (name and address of the Bank) is genuine and if found at any stage to be incorrect / false/ fabricated, EPI shall reject my bid cancel pre-Qualification and Debar me from Participating in any future tender for three years.

I, ----------, the Proprietor / Authorised signatory of M/s ---------- do hereby confirm that the contents of the above Affidavit are true to my knowledge and nothing has been concealed there from -------- and that no part of it is false.
Verified at ---------- this ---------- day of ----------

DEPONENT

ATTESTED BY (NOTARY PUBLIC)

Sign and Stamp of Bidder Sign and Stamp of EPIL

LETTER OF UNDERTAKING
(To Be Enclosed In Letter Head)

To,
CONTRACTS DIVISION
ENGINEERING PROJECTS (INDIA) LTD.
PCO, Bhubaneswar

REF: Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

NIT No: PCO/BBSR/933/155 dtd. 12.01.2024

Sir,

UNDERTAKING FOR ACCEPTANCE OF TENDER CONDITIONS

1. The Tender Documents for the work as mentioned in "Memorandum" to "Form of Tender" have been issued to us by ENGINEERING PROJECTS (INDIA) LIMITED and we hereby unconditionally accept the tender conditions and Tender Documents in its entirely for the above work.

2. The contents of clause 1.2 and 1.3 of the Tender Documents (Instructions to Tenderers) have been noted wherein it is clarified that after unconditionally accepting the tender conditions in its entirety, it is not permissible to put any remarks(s) / condition(s) (except unconditional rebate on price, if any) in the 'Price-Bid' enclosed in "Envelope-2"and the same has been followed in the present case. In case this provision of the Tender is found violated at any time after opening "Envelope-2", We agree that our tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy be at liberty to forfeit the full said Earnest Money absolutely.

3. The required document/Certificate/Declaration for this work is enclosed herewith.

Yours faithfully,

(Signature of the Tenderer)

Seal of Tenderer

Dated:

Sign and Stamp of Bidder Sign and Stamp of EPIL

FORM OF TENDER
(To Be Enclosed In Letter Head)

To,
CONTRACTS DIVISION
ENGINEERING PROJECTS (INDIA) LTD.
PCO, Bhubaneswar

REF: Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

NIT No: PCO/BBSR/933/155 dtd. 12.01.2024

1. We hereby tender for execution of work as mentioned in "Memorandum" to this "Form of Tender" as per Tender Documents within the time schedule of completion of work as per separately signed and accepted rates in the Bill of Quantities quoted by us for the whole work in accordance with the Notice Inviting Tender, Conditions of Contract, Specifications of materials and workmanship, Bill of Quantities Drawings, Time Schedule for completion of jobs, and other documents and papers, all as detailed in Tender Documents.

2. It is agreed that the time stipulated for jobs and completion of work in all respects and in different stages mentioned in the "Time Schedule for completion of jobs" and signed and accepted by us is the essence of the contract. We agree that in case of failure on my/our part to strictly observe the time of completion mentioned for jobs and the final completion of work in all respects according to the schedule set out in the said "Time schedule for completion of jobs" and stipulations contained in the contract, the recovery shall be made from us as specified therein. In exceptional circumstances extension of time which shall always be in writing may, however be granted by EPI at its entire discretion for some items, and We agree that such extension of time will not be counted for the final completion of work as stipulated in the said "Time schedule of completion of jobs".

3. We agree to pay the Security Deposit /Retention money, Performance Guarantee and accept the terms and conditions as laid down in the "Memorandum" to this "Form of Tender".

4. Should this Tender be accepted, We agree to abide by and fulfill all terms and conditions referred to above and as conditioned in Tender Documents elsewhere and in default thereof, allow EPI to forfeit and pay EPI, or its successors or its authorized nominees such sums of money as are stipulated in the Tender Documents.

5. We hereby pay the earnest money amount as mentioned in the “Memorandum” to this “Form of Tender” in favour of Engineering Projects (India) Limited payable at place as mentioned in the “NIT/ITT”.

6. If we fail to commence the work within 10 days of the date of issue of Letter of intent and / or We fail to sign the agreement as per Clause 84 of General Conditions of Contract and/or We fail to submit Performance Guarantee as per Clause 9.0 & 9.1 of General Conditions of Contract, We agree that EPI shall, without prejudice to any other right or remedy, be at liberty to cancel the Letter of Intent and to forfeit the said earnest money as specified above.

7. We are also enclosing herewith the Letter of Undertaking on the prescribed proforma as referred to in condition of NIT.

Date the _____ day of _____

SIGNATURE OF TENDERER ----------
NAME (CAPITAL LETTERS):
OCCUPATION ----------
ADDRESS ----------

SEAL OF TENDERER

MEMORANDUM
(TO BE ENCLOSED IN LETTER HEAD)

Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

NIT No: PCO/BBSR/933/155 dtd. 12.01.2024

Sl NO.	Description	Cl. No.	Values/Description to be applicable for relevant clause (s)
i.	Name of work		Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.
ii.	Client		Mahanadi Coal Limited (MCL)
iii.	Type of Tender	NIT	Item Rate Basis
iv.	Earnest Money Deposit	NIT	**Rs. 18,88,920/-**
v.	Estimated Cost	NIT	**Rs. 9,44,46,000.00** (Excluding GST)
vi.	Time for completion of work	NIT	04 (Four) months from Contractual Commencement date.
vii.	Mobilization Advance	ACC Cl. No. 5	NA
viii.	Interest Rate on Mobilization Advance	Cl. No. 5	NA
ix.	Number of Installments for recovery of Mobilization Advance	Cl. No. 5	As per Additional Conditions of Contract.
x.	Schedule of Rates applicable		Market Rate
xi.	Validity of Tender	NIT	90 days from the last date of submission of bid
xii.	Security Deposit cum Performance Guarantee	ACC (Cl. No. 3)	5% (Five Percent only) of the contract value of the accepted tender within 21 (twenty one) days from the date of issue of Purchase Oder (PO)/ Letter of Intent (LOI). If required, any extension of time beyond 21 days and upto 60 days may be granted by the Competent Authority. However, a penal rate of interest @ 12% per annum shall be charged for the delay in submission of Security Deposit after 21 (twenty one) days i.e. from 22nd day to the date of submission of Security Deposit but within 60 days after the date of issue of PO/ LOI. Further, if 60th day happens to be declared holiday in the concerned office of EPI, submission of Security Deposit can be accepted on the next working day.

Sign and Stamp of Bidder Sign and Stamp of EPIL

			The SDPG shall be submitted in the form of Bank Guarantee (format enclosed), from any Nationalized bank / Scheduled Bank / Commercial Bank or in the form of Insurance Security Bonds or Account Payee Demand Draft or Fixed Deposit Receipt or online Payment in an acceptable form. This SDPG shall be initially remain valid upto 90 (ninety) days after the end of Defect Liability Period (DLP). In case, the time for completion of work gets extended, the contractor shall get the validity of SDPG extended to cover such extended time for completion of work plus DLP plus 90 days. In case, even after 60 days from the date of issue of PO/ LOI, the Bidder fails to submit the Security Deposit of the requisite amount, PO/ LOI will stand withdrawn and EMD of the Bidder shall be forfeited. SDBG shall be released to the contractor after successful completion of DLP without any interest.
xiii.	Retention Money	ACC (Cl. No. 6)	5% from each Supply RA Bill. It will be released after 1 year without any interest after successful completion of Performance Guarantee Test OR 12 Months from the last lot of supply against BG of equivalent amount valid till DLP whichever is earlier
xiv.	Time allowed for starting the work	ACC (Cl. No. 2)	10 (Ten) days from the date of issue of LOI or 1 Week from the day of issue of **First Good for Construction Drawing** whichever is later.
xv.	Defect Liability Period	ACC (Cl. No. 16)	Defect Liability Period is 02 years from the date from satisfactory completion of Performance Guarantee (PG) test
xvi.	Arbitration	ACC (Cl. No. 18)	As per Additional Conditions of Contract.
xvii.	Jurisdiction	76.3	Courts at Bhubaneswar

SIGNATURE OF BIDDER :

NAME (CAPITAL LETTERS) : _____

OCCUPATION : _____

ADDRESS : _____
_____

SEAL OF BIDDER :

Sign and Stamp of Bidder Sign and Stamp of EPIL

ADDENDUM TO INSTRUCTIONS TO TENDERERS

Mode of submission of tender is through e-bids only. Hence clause no. 1 of ITT is deleted.

Kindly refer “Special instructions to Bidders for e-tendering” for downloading & uploading of tender documents as per NIT.

Sign and Stamp of Bidder Sign and Stamp of EPIL

Special instructions to Bidders for e-Tendering

Some Bidding related Information for this Tender (Sealed Bid)

The entire bid-submission would be online only and submitted in CPP Portal i.e. www.etenders.gov.in.

Broad outline of submissions are as follows:

- Submission of Bid-Parts/ Envelopes
  - *Technical-Part*
  - *Financial-Part*

Submission of Bid:

The Bidder should upload the scanned copies of all the original documents as mentioned in **NIT Clause No 23.0** and Bid-Annexures during Online Bid-Submission in addition to PQ documents listed in **NIT Clause.2.0**

Bidder's guide for CPP Portal:

Please refer

Appendix 1 - Bidder Registration Module &

Appendix 2 - Bid Submission Module for assistance in online bidding procedure.

Please note that at the end the bid must be final submit, otherwise the same will not be considered.

For any assistance regarding the Tender Document and/or term and conditions the bidders may contact at EPIL:

Deputy General Manager (T)
(Contracts Division)
Engineering Projects (India) Ltd. (PCO, Bhubaneswar)
3rd Floor, Plot no. 108,
Unit-7, Surya nagar,
Bhubaneswar – 751003,
ODISHA
E-mail : epil.bbsr@epi.gov.in

For any assistance during bid submission, system settings etc. bidders may contact at CPPP:

For any technical related queries please call at 24 x 7 Help Desk Number

0120-4001 002 , 0120-4001 005 , 0120-6277 787

International Bidders are requested to prefix +91 as country code

Technical - support-eproc@nic.in

Policy Related - cppp-doe@nic.in

Sign and Stamp of Bidder Sign and Stamp of EPIL

BIDDER INFORMATION
(To be submitted by Bidder on its Letter Head)

Company Name*	
Registration Number*	
Registered Address*	
Name of Partners/Directors	
Bidder type* Indian/Foreign	
City*	
State*	
Country*	
Postal code*	
PAN/TAN/GST Number*	(PAN/TAN number must have 10 characters. e.g. AESTG2458A)
Company's Establishment Year	
Company's Nature of business*	
Company's Legal status* Limited company/ Undertaking/Joint venture/Partnership/others	
Company Category* Micro unit as per MSME/ Small unit as per MSME/ Medium unit as per MSME/ Ancillary unit/Project of affected person of this company/SSI/others	
Contact Details	
Enter Company's Contact Person Details	
Title * Mr/Mrs/Dr/Shree/Ms	
Contact Name*	
Date of Birth* (DD/MM/YYYY)	
Correspondence Email*	(Correspondence Email ID can be same as your Login ID. All The mail correspondence will be sent only to the Correspondence Email ID.)
Designation	
Phone *	(Phone details eg: +91 44 22272449)
Mobile*	

Sign and Stamp of Bidder Sign and Stamp of EPIL

BANK DETAILS

PAN NO*	
GST NO*	
NAME OF BANK*	
ACTIVE BANK A/C DETAILS*	
A/C NO*	
A/C TYPE*	
BRANCH ADDRESS*	
IFSC *	

*Mandatory information (must be filled by the bidders)

Sign and Stamp of Bidder Sign and Stamp of EPIL

Annexure – B

Site Visit Declaration
(To Be Enclosed In Letter Head)

To,

Contracts Division
Engineering projects (India) Limited
Flat No 201, Plot No – 109,
The Bamra Manor, Unit – 7, Surya Nagar,
Bhubaneswar - 751003

REF: Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

NIT No: PCO/BBSR/933/155 dtd. 12.01.2024

Dear Sir,

I/We ---------- Undersigned visited the project site on ---------- and collected all the required information and data regarding availability of material and noted the environmental condition. I have also signed the attendance register maintained at site in presence of EPI's representative.

Yours faithfully,
(Signature of the Tenderer)

Seal of Tenderer
Dated :

Signature of the EPI's site In change
Date :

Annexure – C

UNDERTAKING
(To Be Enclosed In Letter Head)

REF: Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

NIT No: PCO/BBSR/933/155 dtd. 12.01.2024

This is to confirm that the following persons are the present Directors of the company/firm:

1.
2.
.
.
.

It is further confirmed that none of the above Directors is associated with any other company/firm which is quoting for the above referred tender of EPI.

The details of constitution of M/s ……is submitted along with this annexure.

In case, at any later stage the above information is found incorrect, EPI can cancel our BID/LOI/Contract Agreement and may take any suitable action deemed fit against our company.

Authorized Signatory
CEO/Proprietor/MD

Date:

Name & Seal of the Company

Sign and Stamp of Bidder Sign and Stamp of EPIL

Annexure – D

LOCAL CONTENT DECLARATION
(To Be Enclosed In Letter Head)

REF: Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

NIT No: PCO/BBSR/933/155 dtd. 12.01.2024

We ……..(name of the bidder) undertake that we meet the mandatory minimum local content requirement as per Public Procurement (Preference to Make in India) local content policy against EPI NIT No. ……..dtd……The percentage of of local content in the bid is ……..% and the items offered in the bid meets the minimum local content and shall give details of the location (s) at which the local value addition is made.

(To be self certified by the Bidder)

Date:

Sign and Stamp of Bidder Sign and Stamp of EPIL

Annexure - E

PROFORMA FOR BANK GURANTEE IN LIEU OF EARNEST MONEY DEPOSIT

In consideration of Chairman & managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, Lodhi Road, New Delhi Pin- 110003. (hereinafter called the EPI) having agreed to accept bank Guarantee of Rs. ..... in lieu of EARNEST MONEY DEPOSIT from ..... (hereinafter called the Supplier/ Contractor/ Sub-Contractor, which expression shall include its heirs, successors and assignees) in respect of the Tender for .....

We, ... bank having its registered/head office at..... (hereinafter referred to as the Bank) do hereby agree and undertake to pay to EPI without demur or protest an amount not exceeding Rs..... on demand by EPI.

We the above said Bank further agree and undertake to pay the said amount of Rs. ..... without any demur on demand within 48 hours. Any demand made on the Bank by EPI shall be conclusive as regards the amount due and payable by the Bank under this guarantee.

We the above said Bank further agree that the guarantee herein contained shall be in full force and in effect until ..... date .....

Unless a demand or claim under this guarantee is made on us in writing on or before ..... date ..... , we shall be discharged from all liabilities under this guarantee thereafter.

We, the above said Bank, further agree that EPI shall have full liberty, without our consent and without affecting in any manner our obligation to verify, modify or delete any of the conditions.

We, the above said Bank, lastly undertake not to revoke this guarantee during its currency except with the prior consent of EPI in writing.

Dated……..this day of……..200.

For and on behalf of the Bank

Note: BG should be submitted with Structured Finance Managing System (SFMS) issued by beneficiary bank.

Sign and Stamp of Bidder Sign and Stamp of EPIL

Annexure-F

BANKERS' CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./ Sh. …… ..... having marginally noted address,..... ....as a Customer of our bank are/ is respectable and can be treated as good for any engagement upto a limit of Rs..... (Rupees ....)

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature) For the Bank

NOTE

1. Bankers Certificates should be on letter head of the Bank, addressed to tendering authority .

2. In case of _Partnership firm, certificate should include names of all partners as recorded with the Bank.

FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT

"It is to certify that as per the audited balance sheet and profit & loss account during the financial year ....., the Net Worth of M/s ..... (Name & Registered Address of individual/firm/ company) , as on .... (the relevant date) is Rs. ..... after considering all liabilities. It is further certified that the Net Worth of the company has not eroded by more than 30 % in the last three years ending on (the relevant date)."

Unique Document Identification Number (UDIN) .....

Signature of Chartered Accountant ……..
Name of Chartered Accountant .....
Membership No. of ICAI
Date and Seal

Annexure - G

PROFORMA FOR SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE

The Chairman & Managing
Director, Engineering Projects (India) Ltd.,
Core-3, SCOPE Complex
7, Institutional Area,
Lodhi road, New Delhi –110 003

Dear Sir,

In consideration of the Chairman & Managing Director, Engineering Projects (India) Ltd. (hereinafter called 'EPI' which expression shall unless repugnant to the subject or context includes its successors and assigns) having agreed under the terms and conditions of supply contract /sub-contract no..... Dated.....made between..... .....(hereinafter referred to as the said Supplier/subcontractor) which expression shall unless repugnant to the subject or context includes its successors and assigns) and EPI in connection with..... (Hereinafter called 'The said supply Contract/Sub-contract) to accept a Deed Security Deposit-cum-Performance bank guarantee as herein provided for lieu of:

a) The Security Deposit to be made by the said supplier/cub-contractor for the due fulfillment by the said supplier/sub-contractor of the terms and conditions contained in the said supply contract/subcontract, and

b) Fulfillment of the conditions of the said supply contract /sub-contract/furnishing a security for the performance of the equipment in accordance with conditions of the said Contract.

We..... (Hereinafter referred to as "the said bank a Government of India Undertaking which expression shall unless repugnant to the subject or context includes its successors and assigns) and having our registered office at .....do hereby unconditionally and irrevocably undertake and agree to indemnify and keep indemnified EPI from time to time to the extent of (.....) only against any loss of damages, costs, charges and expenses caused to or suffered by or that may be caused or suffered by EPI by reason of any breach or breaches by the said supplier/sub-contractor of any of the terms and conditions contained in the said supply contract/sub-contract and or any amount becoming due for non-performance and /or penalty as assessed by EPI and top unconditionally pay the amount claimed by EPI on demand and without demur.

We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said supply contract/sub-contract and till all the dues of EPI under the said supply contract/sub-contract or by virtue of any of the terms and conditions governing the said contract have been fully paid and its claims satisfied or discharged and till EPI certifies that the terms and conditions of the said supply contract/sub-contract have been fully and properly carried out by the said supplier/ sub-contractor and accordingly discharge this guarantee subject, however, that EPI shall have no claim under this guarantee after 6 months from the date of expiry of the guarantee unless a notice of the claim under this guarantee has been served on the Bank before the expiry of the said period of 6 months.

EPI shall have the fullest liberty without affecting in any way the liability to the said Bank under this Guarantee or indemnity from time to time to vary any of the terms and conditions of the said supply contract/sub-contract to extend time of performance of the said Contract or to postpone for any time and from time to time any power's exercisable by it against the said Supplier/sub-contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said contract or securities available to EPI and the said Bank shall not be released from its liability under these presents by any exercise by EPI of the liberty with reference to the matters aforesaid or by reason of time being given to the said supplier/sub-contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of so releasing the said bank from its such liability.

We, the said bank, further agree that EPI shall be the sole judge of and as to whether the said supplier/sub- contractor has committed any beach or breaches of any of the terms and conditions of the said supply contract/ sub-contact and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by EPI on account thereof and the decision of EPI that the said supplier/sub-contractor has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges and expenses caused to or suffered by EPI from time to time shall be final and binding on the bank.

This guarantee shall be a continuing quarantine and shall remain valid and irrevocable for all claims of EPI and liabilities of the said supplier/sub-contractor arising upto and until mid night of……, subject the claim period as mentioned in para…….

This guarantee shall be in addition to any other guarantee or security whatsoever that EPI may now or at any time anywise may have in relation to the said supplier/sub-contractor obligation/liabilities under and/or in connection with the said supply contract/sub-contract and EPI shall have full authority to take recourse to or enforce this guarantee in preference to any other guarantee or security which EPI may have or obtain and there shall be no forbearance on the part of EPI IN ENGINEERING OR REQUIRING ENFORCEMENT OF ANY OTHER SECURITY AND shall not have the effect of releasing the said bank from its full liability hereunder:

EPI shall be at liberty without reference to the said bank and without effecting the full liability of the said Bank hereunder to take any other security in respect of the said

supplier's/sub-contractor's obligations and/or liabilities under or in connection with the said contract.

This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the said supplier/sub-contractor, but shall in all respects and for all purposes be binding and operative until payment of all moneys paid to EPI in terms thereof.

The said bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the said bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the said supplier/sub-contractor.(whether or not pending before any arbitrator, tribunal or court) of any denial or liability by the said supplier/sub-contractor stopping or preventing or purporting to stop or prevent any payment by the said bank to EPI in terms hereof.

The amount stated in any notice of demand addressed to EPI to the Guarantor as liable to be paid to EPI by the Supplier/sub-contractor on account of any losses or damages or costs, charges and /or expenses shall as between the said bank and EPI be conclusive providence of the amount so liable to be paid to EPI or suffered or incurred by EPI as the case may be and payable by the said Bank to EPI in terms hereof. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand to EPI without demur.

We, the said bank undertake not to revoke this quarantine during its currency except with the consent of EPI in writing and agree that any change in the constitution of the said supplier/sub-contractor or the said Bank shall not discharge our liabilities hereunder.

It shall not be necessary for EPI to proceed against the said supplier/sub-contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the bank notwithstanding any security which EPI may have obtained or obtain from the supplier/sub-contractor shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealized.

Our liability under this guarantee shall be restricted to.....and this guarantee shall remain in force until midnight of .....unless a claim to enforce this guarantee is filed with us within six months from .....(which is date of expiry of this guarantee), we shall be discharged from all liabilities under this guarantee thereafter.

Dated..... This day of ..... 20.....

FOR AND ON BEHALF OF BANK

Note: BG should be submitted with Structured Finance Managing System (SFMS) issued by beneficiary bank.

ADDITIONAL CONDITION OF CONTRACT (ACC)

1.	**General :**
	The Additional Conditions shall be read in conjunction with General Conditions of Contract. Where the provisions of these Additional Conditions are at variance with the provision of the General Conditions of Contract, the provisions of these Additional Conditions shall take precedence.
2.	**Commencement and Completion of Project:**
	The Contractual Commencement date shall be from the 10th day of issue of Letter of Intent of Acceptance of Tender or 1 week from the day of issue of First Good for Construction drawing whichever is later. **Completion Period:** Four months from Contractual Commencement date. As per priority and fronts available work is to be executed.
3.	**Security Deposit cum Performance Guarantee:**
	5% (Five Percent only) of the contract value of the accepted tender within 21 (twenty one) days from the date of issue of Purchase Oder (PO)/ Letter of Intent (LOI). If required, any extension of time beyond 21 days and upto 60 days may be granted by the Competent Authority. However, a penal rate of interest @ 12% per annum shall be charged for the delay in submission of Security Deposit after 21 (twenty one) days i.e. from 22nd day to the date of submission of Security Deposit but within 60 days after the date of issue of PO/ LOI. Further, if 60th day happens to be declared holiday in the concerned office of EPI, submission of Security Deposit can be accepted on the next working day. The SDPG shall be submitted in the form of Bank Guarantee (format enclosed), from any Nationalized bank / Scheduled Bank / Commercial Bank or in the form of Insurance Security Bonds or Account Payee Demand Draft or Fixed Deposit Receipt or online Payment in an acceptable form. This SDPG shall be initially remain valid upto 90 (ninety) days after the end of Defect Liability Period (DLP). In case, the time for completion of work gets extended, the contractor shall get the validity of SDPG extended to cover such extended time for completion of work plus DLP plus 90 days. In case, even after 60 days from the date of issue of PO/ LOI, the Bidder fails to submit the Security Deposit of the requisite amount, PO/ LOI will stand withdrawn and EMD of the Bidder shall be forfeited. SDBG shall be released to the contractor after successful completion of DLP without any interest.

4.	Price quoted is to be firm inclusive of all taxes and duties including GST as per GCC Cl no. 13. No escalation is payable.
5.	**Mobilization Advance:**
	Deleted
6.	**Retention Money:**
	5% from each Supply RA Bill. It will be released after 1 year without any interest after successful completion of Performance Guarantee Test OR 12 Months from the last lot of supply against BG of equivalent amount valid till DLP whichever is earlier
7.	**Taxes and Duties:**
	The following shall be also read with clause no 13 of GCC: 1. The bidder/Contractor must be registered with GST for Odisha and should have valid GSTIN number. 2. The bidder/contractor must submit as an compliances of GST Act, the invoices in GST compliant format failing which the GST amount shall be recovered/ adjusted by EPI without any prior notice from the next invoices or available dues with EPI. 3. The bidders/contractors are requested to update/upload the GST/Taxes data periodically so as to enable EPI to avail ITC credit failing which EPI shall be recover/ adjust the same without any prior notice from the next invoices or available dues with EPI. 4. Rates quoted in this tender shall be all inclusive with all other taxes and duties, cess etc. including GST. **(Presently 18%) It may change at prevailing rate from time to time as reimbursed by client**. 5. Bidder while quoting the rates in the tender must also consider the ITC credit applicable for the works, if any.
8.	**Variation In Taxes, Duties, Levies And Imposition Of New Taxes Etc.**
	The rates quoted by the contractor shall be inclusive of all taxes and duties. However such duties, taxes, levies, etc. which shall be notified after the last date of submission of bid and /or any increase/decrease over the rate existing on the last date of submission of Bid shall be reimbursed/recovered by the company on production of documentary evidence in support of payment actually made to the concerned authorities subject to reimbursed the same by client.

9.	**Land For Labour Huts/ Site Office And Storage Accommodation**
	Deleted
10.	**Water, Electricity & Security**
	a) The Contractor shall make its own arrangement for Water & Electrical power for construction and other purposes at its own cost. b) The Contractor shall make its own arrangement for Security of their material(structural steel/fabricated item), machinery and works at site. C)MCL is going to provide construction power at one point inside battery limit, contractor has to make its own arrangements for taking construction power for their use.
11.	**Secured Advance**:
	Deleted
12.	**Payment:**
	A) Against the supply of the Fabricated Items within the premises-90% (As per fabrication drawing and instruction of Engineer) B) After completion of Assembly and Alignment-5% C)Final Accepteance-5%. All RA bills will be supported by Test certificates, Dispatch Clearance and other necessary documents issued by EPI/MCL/CMPDI (As per requriment).
13.	**BAR Chart:**
	The Contractor shall also furnish within 10 days from the date of letter of Intent, a Bar Chart on MS Projects for completion of work within stipulated time. This will be duly got approved from EPI. This approved MSP Chart shall form a part of the agreement. Achievement of milestones as well as total completion has to be within the time period allowed.
14.	**Works to Be Open to Inspection:**
	All works executed or under the course of execution in pursuance of this contract shall at all times be open to inspection and supervision of EPI. The work during its progress or after its completion may also be inspected, by Chief Technical Examiner of Government of India (CTE) and/ or an inspecting authority of State Government of State in which work is executed and/or by third party checks by Owner/ Clients. The compliance of observations/ improvements as suggested by the inspecting officers of EPI/CTE/ State authorities/ Owners shall be obligatory on the part of the Contractor at

	the cost of Contractor. **Any recovery, penalty imposed by CTE due to non-performance, non-compliance of agreed condition or otherwise whatsoever the same shall be recovered from RA Bill of contractor.**
15.	**Variation In Specification, Design, Quantity And Drawings**
	Quantity for Individual items may vary to any extent but the Contract Amount is restricted to deviation of 20%. The individual rates quoted by bidder remains same till completion of project.
16.	**Defect Liability Period :**
	Defect Liability Period is 02 years from the date from satisfactory completion of Performance Guarantee (PG) test; all other condition of GCC Clause No 74 is remains same.
17.	**Materials Procured With the Assistance of EPI:**
	If any material for the execution of this contract is procured with the assistance of EPI either by issue from its stores or purchase made under orders of permits or licenses obtained by EPI, the contractor shall hold and use the said materials economically and solely for the purpose of this contract and shall not dispose them without the written permission of Engineer-In-Charge. The contractor, if required by EPI, shall return all such surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination on whatsoever reason, on being paid or credited such price as EPI shall determine having due regard to the conditions of materials. **All the materials are deemed to be in scope of contractor and shall be arranged by him, however if any such material is procured with assistance of EPI, a handling charges of 10% plus GST on actual purchase cost shall be levied and recovered from RA bills of contractors.**
18.	**Arbitration:**
	General Conditions of Contract (GCC) Sub Clause no.76.1 and 76.3 of Arbitration Clause no.76.0are amended as given below. Sub Clause no.76.2 will remain the same. 76.0 ARBITRATION 76.1 Before resorting to arbitration as per the clause given below, the parties if they so agree may explore the possibility of conciliation as per the provisions of Part III of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015. When such conciliation has failed, the parties shall adopt the following procedure for

	arbitration: i) Except where otherwise provided for in the contract, any disputes and differences relating to the meaning of the Specifications, Design, Drawing and Instructions herein before mentioned and as to the quality of workmanship or materials used in the work or as to any other questions, claim, right, matter or things whatsoever in any way arising out of or relating to the Contract, Designs, Drawings, Specifications, Estimates, Instructions, or these conditions or otherwise concerning the works of the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the Sole Arbitrator appointed by the Chairman & Managing Director (CMD) of Engineering Projects (India) Limited (EPI) or any other person discharging the functions of CMD of EPI. The person approached for appointment as Arbitrator shall disclose in writing circumstances, in terms of Sub-Section (1) of Section (12) of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015 as follows: a) such as the existence either direct or indirect, of any past or present relationship with or interest in any of the parties or in relation to the subject-matter in dispute, whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to his independence or impartiality; and b) which are likely to affect his ability to devote sufficient time to the arbitration and in particular his ability to complete the entire arbitration within a period of twelve months. The Arbitrator shall be appointed within 30 days of the receipt of letter of invocation of arbitration duly satisfying the requirements of this clause. ii) if the arbitrator so appointed resigns or is unable or unwilling to act due to any reason whatsoever, or dies, the Chairman & Managing Director aforesaid or in his absence the person discharging the duties of the CMD of EPI may appoint a new arbitrator in accordance with these terms and conditions of the contract, to act in his place and the new arbitrator so appointed may proceed from the stage at which it was left by his predecessor. iii) It is a term of the contract that the party invoking the arbitration shall specify the dispute/ differences or questions to be referred to the Arbitrator under this clause together with the amounts claimed in respect of each dispute. iv) The Arbitrator may proceed with the arbitration ex-parte, if either party, in spite of a notice from the arbitrator, fails to take part in the proceedings. v) The work under the contract shall continue as directed by the Engineer-In-Charge,

	during the arbitration proceedings. vi) Unless otherwise agreed, the venue of arbitration proceedings shall be at the venue given in the 'Memorandum' to the 'Form of Tender". vii) The award of the Arbitrator shall be final, conclusive and binding on both the parties. viii)Subject to the aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modifications or re-enactment thereof and the Rules made there under and for the time being in force shall apply to the arbitration proceedings and Arbitrator shall publish his Award accordingly. 76.3 JURISDICTION: The courts in Bhubaneswar alone will have jurisdiction to deal with matters arising from the contract.
19.	**Furnished Office Accommodation & Mobility and Communication**
	Deleted
20.	**Insurance:**
	In addition to GCC clause no. 17 is modify as under EPI shall take Marine Cum Erection (MCE) policy for the whole project. The CONTRACTOR shall assist EPI in follow up with insurance company in case of any claim related to CONTRACTOR's scope of work. EPI is not liable to pay any claim of the CONTRACTOR of it is not paid by insurance company due to any reasons whatsoever. If required contractor can take separate insurance cover for their scope of work also. **1. Workmen's Compensation Policy** Contractor has to obtain workmen compensation Policy, Transit Insurance, Erection Policy etc. required for the scope of work till completion of their Scope of Work. The above is an illustrative list of insurance covers normally required and it will be responsibility of the contractor to maintain all necessary insurance cover to the extent and time and amount to take car of all it's liabilities either direct or indirect, in pursuance of the contract. 2. Automobile Liablility / Motor Third Party Liability Insurance as per Motor Vehicle Act for bidder owned vehicles.

	3. Other insurance like health insurance, personal accident insurance, plant and machinery insurance etc. as required for the job must be obtained by bidder. 4. Bidder shall provide to EPI a copy of all above insurance policies / certificates. 5. Bidder shall be liable for or in respect of any damages or compensation payable by Law in respect of or in consequence of any accident or injury to any workman or other person under bidder's employment.
21.	**Labour:**
	EPI will issue (Form-V) and contractor has to take Labour License in its own name. The Contractor shall, unless otherwise provided in the GCC Clause reference, make its own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport. The contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require. The CONTRACTOR shall also be responsible for labour welfare and for arranging labour and other licenses/permits/clearance etc. for the project at their own. In case EPI has to take labour license or and other licenses, all expenditure towards the same shall also be borne by the CONTRCATOR. The CONTRACTOR shall comply with all the requirements as per labour laws/acts. All the records in this regard shall be maintained by CONTRACTOR as per statutory requirements and rules and shall be produced by the CONTRACTOR on demand if required.
22.	**Compliance With Labour Regulations :**
	During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and by e laws of the State or Central Government or local authority and any other labour law (including rules), regulations, byelaws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on

	the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time. INBUILDING AND OTHER CONSTRUCTION WORK. SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK. a) Workmen Compensation Act 1923:- The Act provides for compensation in case of injury by accident arising out of and during the course of employment. b) Payment of Gratuity Act 1972:- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees. c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are: (i) Pension or family pension on retirement or death, as the case may be. (ii) Deposit linked insurance on the death in harness of the worker. (iii) Payment of P.F. accumulation on retirement/death etc. (iv) Contractors are assigned to submit copy of "ECR" Electronic challan fees of the PF Deposited by 20th of next month. d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc. e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.

	f) Minimum Wages Act 1948:- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, and Runways are scheduled employments. g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers. h) Equal Remuneration Act 1979:- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc. i) Payment of Bonus Act 1965:- The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above up to Rs.3500/- per month shall be worked out by taking wages as Rs.2500/-per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act. j) Industrial Disputes Act 1947:- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment. k) Industrial Employment (Standing Orders) Act 1946:- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority. l) Trade Unions Act 1926:- The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities. m) Child Labour (Prohibition & Regulation) Act 1986:- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other

	occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry. n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home up to the establishment and back, etc. o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996:- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government. p) Factories Act 1948:- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process
23.	The CONTRCTOR shall be fully responsible to complete the "Works" in workmen like manner to the satisfaction of the Client and EPI by maintaining high standard of quality and precision as per 'Tender Documents,' Agreements, Terms & Conditions, Specifications, Drawings etc. within contractual completion period and within their quoted rates/ amount. The rates quoted/finalized shall remain firm throughout till completion of works including the extended period for which Extension shall be granted by EPI without Levy of L.D & in no case rate shall be revised.
24.	The CONTRACTOR shall deploy sufficient plant & equipment of the required and in good working condition for completion of the works in stipulated time with required quality, the equipment should either be owned by the CONTRACTOR or hired/leased. The deployment of equipment by CONTRACTOR shall be as decided by EPI and the

	same shall not be less than the minimum deployment stipulated by the Client, if any for execution of "Works" and as per schedule agreed with EPI. The CONTRACTOR shall make arrangement for regular maintenance including preventive and breakdown maintenance and maintain stock of essential spares at site/near to site so as to ensure minimum breakdown time of equipment. The equipment once brought to site shall not be allowed to be removed without the consent of EPI. In case the CONTRACTOR fails to deploy sufficient equipment to the satisfaction of EPI or in case of prolonged breakdown of equipment, EPI at its sole discretion shall arrange the required equipment and debit all the related costs including 10% overheads of EPI and shall recover the same from the due payments of CONTRACTOR, including from its bank guarantees Retention money /other dues available with EPI.
25.	**PRIORITY OF WORK:**
	The contractor has to deploy resources and plan the work accordingly and nothing extra shall be payable to the contractor on this account. The contractor has to ensure safety of the occupants as to avoid any hazard to occupants.
26.	If any tenderer withdraws his tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or makes any modifications in the terms and conditions of the downloaded tender which are not acceptable to the EPIL, then the EPIL shall, without prejudice to any other right or remedy, be at liberty to forfeit entire amount of Earnest Money as aforesaid
27.	The final bill will be submitted by the contractor within 60 days from the date of acceptance of completion of work accompanied by the following documents : c) No claim certificate by the contactor. d) No claim certificate from the sub-agencies / venders engaged by the contractor. i) All statutory approvals from various state / central govt. local bodies, if required for completion & handing over of the work as included in scope of Contractor. j) Manufacture's guarantee/Test certificates of various machines / equipment's installed as part of works.
28.	All the tests other than the field test which are to be done as per tender document and specifications will be arranged by the respective party and all expenses etc. shall be borne by the respective party and nothing will be paid/reimbursed to party by EPI.
29.	**Liquidated Damages**

29.1	If the contractor fails to maintain the required progress in terms of the agreed time and progress chart or to complete the work and clear the site on or before the date of completion of contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation/ Liquidated Damages @ half percent (1/2%) of the contract price per week of delay. The aggregate of such compensation/ compensations shall not exceed 10 (ten) percent of the total value as shown in the contract. This will also apply to items or group of items for which separate period of completion has been specified. The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with the company.
29.2	EPI, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent of the contract value of the works for each week or part of the week subject to a ceiling of 10% of the contract price.
29.3	EPI, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract. If the progress is not as per the Completion Schedule EPI has the liberty to reduce the Scope of Work and get the Work done by inducing other agencies at the Risk & Cost.
29.4	EPI, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
29.5	In the event of such termination of the contract as described in clauses 29.3 or 29.4 or both, the company, shall be entitled to recover L.D. up to ten percent (10%) of the contract value besides recovery of compensation for damage/loss for termination as provided in Clause no. 32.6.
30	**Contractor's Default**

30.1	If the contractor shall neglect to execute the works with the diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him, if writing by the engineer in connection with the works or shall contravene the provisions of the contract, the owner may give notice in writing to the contractor to make good the failure, neglect or contravention complained of. Should the contractor fail to comply with the notice within thirty (30) days from the date of service thereof, then and in such case the owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the contractor may have neglected to do or if the owner shall think fit, it shall be lawful for him, without prejudice to any other right he may have under the contract, to take the works wholly or in part thereof and in that event the owner shall have free use of all contractor's equipment that may have been at the time on the site in connection with the works without being responsible to the contractor for fair wear and tear thereof and to the exclusion of any right of the contractor over the same, and the owner shall be entitled to retain and apply any balance which may otherwise be due on the contract by him to the contractor, or such part thereof as may be necessary, the payment of the cost of executing the said part of the works or of completing the works as the case may be. If the cost of completing the works or executing a part thereof as aforesaid shall exceed the balance due to the contractor, the contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the contractor shall have to pay if the completion of works is delayed.
30.2	In addition, such action by the owner as aforesaid shall not relieve the contractor of his liability to pay liquidated damages for delay in completion of works as defined in clause 15.0 of this section.
30.3	The termination of the contract under this clause shall not entitle the contractor to reduce the value of the performance bank guarantee nor the time thereof. The performance guarantee shall be valid for the full value and for the full period of the contract including guarantee period.
30.4	if the contractor fails to complete the work and the order is cancelled, the amount due to him on account of work executed by him, if payable, shall be paid to him only after due recoveries as per the provisions of the contract and that too after alternative arrangements to complete the work has been made.
31	**Force Majeure**
31.1	Force majeure is herein defined as any cause which is beyond the control of the contractor or the owner as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

	(a) natural phenomena, including but not limited to floods, draughts, earthquakes and epidemics (b) acts of any government, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes, Provided either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.
31.2	(a) The successful bidder / contractor will advise, in the event of his having resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition. In the event of delay lasting over two months, if arising out of Force Majeure, the contract may be terminated at the discretion of the company. (b) For delays arising out of Force Majeure, the bidder/ contractor will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither company nor the bidder shall be liable to pay extra costs (like increase in rates, remobilization advance, idle charges for labour and machinery etc.) Provided it is mutually established that the Force Majeure conditions did actually exist. (c) If any of the Force Majeure conditions exists in the place of operation of the bidder even at the time of submission of bid he will categorically specify them in his bid and state whether they have been taken into consideration in their quotations.
31.3	The contractor or the owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above. The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after contractor's performance of his obligations has been delayed for other causes.
32	**Termination, Suspension, Cancellation & Foreclosure of contract**
32.1	The owner shall, in addition to other remedial steps to be taken as provided in the conditions of contract, be entitled to cancel the contract in full or in part, if the contractor a. makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-in-charge, then on the expiry of the period as specified in the notice or b. commits default/breach in complying with any of the terms and conditions of the

	contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-in-charge, then on the expiry of the period as may be specified by the Engineer-in - charge in a notice in writing or c. fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the company, then on the expiry of the period as may be specified by the Engineer-in-charge in a notice in writing or d. shall offer or give or agree to give any person in the service of the company or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other contract for the company. or e. Shall try to obtain a contract with the company by way of ring tendering or other non- bonafide method of competitive tendering. or f. transfers, sublets, assigns the entire work or any portion there of without the prior approval in writing from the Engineer -in-charge. The Engineer-in - charge may by giving a written notice, cancel the whole contract or portion of it in default.
32.2	The owner shall in such an event give fifteen (15) days notice in writing to the contractor of his decision to do so.
32.3	The contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to the work terminated and terms satisfactory to the owner, stop all further sub – contracting or purchasing activity related to the work terminated, and assist the owner in maintenance, protection, and disposition of the works acquired under the contract by the owner.
32.4	The contract shall stand terminated under the following circumstances unless the owner is satisfied that the legal representatives of the individual contractor or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the contract and the owner shall in any way not be liable to payment of any compensation to the estate of deceased contractor and/or to the surviving partners of the contractor's firm on

	account of the termination of the contract.: a. If the contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of insolvency act for the time being in force, or makes any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any insolvency act. b. In the case of the contractor being a company, its affairs are under liquidation either by a resolution passed by the company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganization, or a receiver or manager is appointed by the court on the application by the debenture holders of the company, if any. c. If the contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21 days. d. On the death of the contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the company is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the contract. The decision of the company in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.
32.5	If the contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the contractor is a partnership concern and one of the partners dies, then unless the owner is satisfied that the legal representatives of the individual contractor or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the contract the owner shall be entitled to cancel the contract as to its in complete part without being in any way liable to payment of any compensation to the estate of deceased contractor and/or to the surviving partners of the contractor's firm on account of the cancellation of the contract. The decision of the owner that the legal representatives of the deceased contractor or surviving partners of the contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the owner shall not hold the estate of the deceased contractor and / or the surviving partners of the estate of the deceased contractor and / or the surviving partners of the contractor's firm liable to damages for not completing the contract.
32.6	On cancellation of the contract or on termination of the contract, the Engineer-in-charge shall have powers

	a. To take possession of the site and any materials, constructional plant, implements, stores, etc. thereon. b. In such an event, the contractor shall be liable for loss/damage suffered by the employer because of action under this clause and to compensate for this loss or damage, the employer shall be entitled to recover higher of the following: i. Forfeiture of security deposit comprising of Performance Guarantee and Retention Money, at the disposal of the employer. or ii. 20% of value of incomplete work (Contract Value minus already executed value of the work). The amount to be recovered from the contractor as determined above, shall, without prejudice to any other right or remedy available to the employer as per law or as per agreement, will be recovered from any money due to the contractor on any account or under any other contract and in the event of any shortfall, the contractor shall be liable to pay the same within 30 days. In case of failure to pay the same the amount shall be debt payable. In the event of above course being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased materials, equipment or entered into agreement or made advances on any account or with a view to the execution of work or performance of the contract. And in case action is taken under any of provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum for any work thereof or actually performed under this contract unless and until the engineer-in-charge has certified in writing the performance of such work and value payable in respect thereof and he shall only be entitled to be paid the value so certified. The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the company shall not however arise in the case of termination of the contract for death/demise of the contractor.
33	**Taxes, Permits & Licences**
33.1	The contractor shall be liable and pay all- Indian taxes, duties, levies, royalties, whether local, municipal, provincial or central lawfully assessed against the owner or the contractor in pursuance of the contract. In addition, the contractor shall be responsible for payment of all Indian duties, levies and taxes lawfully assessed against the contractor for his personal income and property only. The contractor, along with his bills, shall submit proper documents in the name of the Company to enable the Company to claim Input Tax Credit under the applicable laws. The

	invoice shall be in compliance with the relevant rules
33.2	The Company shall deduct Income Tax as per prevalent rate from time to time from the gross amount (excluding GST) of the bill payable to the contractor; at present the rate of deduction is 1% for individual/proprietorship firm and 2% for others.
34	**Packing and forwarding**
34.1	The contractor, wherever applicable, shall after proper painting, pack in such a manner so as to protect items from deterioration and damage during rail or road transportation to site and storage at the site till the time of erection. Contractor shall be responsible for all damage due to improper packing.
34.2	The contractor shall also give all shipping information concerning the weight, size and content of each packing including any other information EPI may require.
	All individual items need to be marked and punched and contractor shall prepare detailed packing list of all material etc.
35	**Liability for accident and damages**
	Contractor shall be responsible for loss or damage to the material due to any unforeseen event until the completion of Performance Guarantee Test.
36	**Site visit**
36.1	The bidder, at the Bidder's own responsibilities, cost and risk, can visit and examine the Site of Works and it's surrounding, approach road, soil condition, investigation report, existing works, if any, connected to the tendered work, drawings connected to the work, if / as available and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the works. The cost of visiting the Site shall be at the Bidder's own expense
36.2	It shall be deemed that the tenderer has visited the Site/Area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether he actually visits the Site/Area or not and has taken all the factors into account while quoting his rates and prices
36.3	The Bidder is expected, before quoting his rate, to go through the requirement of materials/workmanship, specification, requirements and conditions of contract.
37	**Protection of Work**

	The contractor shall have total responsibility for protecting his works till it is finally taken over by the engineer. No claim will be entertained by the owner or the engineer for any damage or loss to the contractor's works and the contractor shall be responsible for the complete restoration of the damaged works to its original condition to comply with the specifications and drawings. Should any such damage to the contractor's works occur because of other party not under his supervision or control, the contractor shall make his claim directly with the party concerned. If dis-agreement or conflict or dispute develops between the contractor and the other party or parties concerned regarding the responsibility for damage to the contractor's works the same shall be resolved as per the provisions of the clause 7.0 above-entitled co-operation with other contractors. The contractor shall not cause any delay in the repair of such damaged works because of any delay in the resolution of such disputes. The contractor shall proceed to repair the work immediately and the cause thereof will be assigned pending resolution of such dispute.
38	**Mandatory Safety Requirement:**
	a) Bidder shall follow the Handbook on construction safety practices as per SP 70:2001 (Bureau of Indian Standards) The Contractor shall at his own expenses arrange for the safety provisions as given below in respect of all Labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. b) All necessary personal safety equipment shall be available for use of persons on the site and Contractor shall take adequate steps to ensure proper use of equipment by those concerned. (i) Workers shall be provided with Helmet, Safety Shoe, High Visibility Jacket, Glove, Safety Belt / Full body safety Harness etc. (ii) Those engaged in handling any material which is injurious to eyes shall be provided with protective Goggles. (iii) The machinery, plant & equipment to be deployed by contractor shall be in good working condition. (iv) Bidder shall strictly ensure that the labours will not cause any damage to the cultivating land or cause any hindrance to existing operations in the existing facilities. (v) Bidder must reconcile Safety issues with EPI safety Officer on daily basis.
39	**Approved Make for Structural Steel-** SAIL / TISCO / RINL / JINDAL
40	**Minimum Requirement of Technical Staff:** Deleted

ENGINEERING PROJECTS (INDIA) LIMITED

(A Govt. of India Enterprise)

INSTRUCTIONS TO TENDERERS

AND

GENERAL CONDITIONS OF CONTRACT

DECEMBER, 2007

VOLUME-I

Issued to : M/s. _____

_____

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_____

ENGINEERING PROJECTS (INDIA) LIMITED
(A Govt. of India Enterprise)

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ENGINEERING PROJECTS (INDIA) LIMITED
(A Govt. of India Enterprise)

INSTRUCTIONS TO TENDERERS

ENGINEERING PROJECTS (INDIA) LIMITED

(A Govt. of India Enterprise)

INSTRUCTIONS TO TENDERERS

1.0 **MODE OF SUBMISSION**

The Tender is to be submitted in two separate sealed covers marked as under :

ENVELOPE-1 :-

This ENVELOPE shall contain the following :

i) Earnest Money Deposit as per clause 2.0 of 'Instructions to Tenderers' (ITT).
ii) Letter of Undertaking for un-conditional acceptance of the tender conditions as per proforma given in ITT.
iii) Pre-Qualification Documents and Credentials as per clause 19.0 of ITT.
iv) Volume-I (ITT, General Conditions of Contract),
Volume-II (Notice Inviting Tender, Additional Conditions of Contract, Specifications, Drawings) and Corrigendum/ Addendum, if any, duly filled in, signed and stamped on each page by tenderer. Cutting or over-writing, if any, shall be signed and stamped by the person signing the Tender. All pro-forma forming part of Tender Documents shall be filled in, signed and stamped by the tenderer.
v) Copy of power of attorney / partnership deed, duly attested by Notary Public authorizing the person who signs the Tender.
vi) Any other information as required to be submitted along-with the Tender.

This envelope shall be marked as :

ENVELOPE-1 "TECHNO-COMMERCIAL BID" FOR (Name of work as mentioned in "Notice Inviting Tender")

NIT No. : _____
DUE ON : _____
FROM : (Name of the Contractor)

ENVELOPE – 2 :-

This ENVELOPE shall contain only the **Volume-III** comprising of **PRICE-BID**.

This envelope shall be marked as :

ENVELOPE-2 : '**PRICE-BID' FOR** (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____
DUE ON : _____
FROM : (Name of the Contractor)

Both the envelopes / packets shall be individually sealed and kept in an outer envelope marked as :

TENDER FOR (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

DUE ON : _____

FROM : (Name of the Contractor)

The outer envelope shall be duly sealed and shall be delivered at place of submission of Tender by the date and time fixed for receipt of Tender as mentioned in "Notice Inviting Tender". The Tenders received after the date and time of Tender receipt shall not be considered and shall be returned to the tenderer unopened. EPI shall not be responsible for any postal or other delays, whatsoever and tenderer should take care to ensure the submission of Tender at place of receipt of Tender by due date and time fixed for Tender receipt. **All the envelopes shall be addressed to the** authority who has invited the Tender as mentioned in "Notice Inviting Tender".

1.1 First the Envelope-1 of the tenderer shall be opened. Tenderers who un-conditionally accept the tender conditions, deposit the required Earnest Money and whose Techno-Commercial Bid along with PQ Documents is found suitable shall be considered for the opening of their Price Bid and Envelope-2 of such tenderers shall only be opened. The Tenders not accompanied by requisite Earnest Money and / or not conveying un-conditional acceptance of tender conditions or whose Techno-Commercial Bid and PQ Documents are not found suitable, shall be rejected and such tenderer shall not be allowed to attend Price Bid opening i.e. opening of Envelope-2.

1.2 Once the tenderer has given an unconditional acceptance to the tender conditions in its entirety, he is not permitted to put any remark(s) / condition(s) (except unconditional rebate on price, if any) in / along with the 'Price-Bid' / Tender.

1.3 In case the condition 1.2 mentioned above is found violated at any time after opening of Tender, the Tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy, be at liberty to forfeit the full said Earnest Money absolutely.

2.0 EARNEST MONEY DEPOSIT

Earnest Money Deposit of amount as mentioned in "NIT/ITT/Memorandum" to "Form of Tender" required to be submitted alongwith the Tender shall be in the form of Demand Draft payable at place as mentioned in "NIT/ITT" in favour of EPI Limited from any Nationalized / Scheduled Bank or in the form of Bank Guarantee from any Nationalized / Scheduled Bank in enclosed format. The EMD Bank Guarantee shall be valid for a minimum period of 150 (One Hundred Fifty) days from last day of submission of Tender. The EMD shall be governed by Clause 7.0 of General Conditions of Contract.

3.0 EPI reserves the right to reject any or all the Tenders in part or full without assigning any reason whatsoever thereof. EPI does not bind themselves to

accept the lowest Tender. EPI reserves the right to award the work to a single party or to split the work amongst two or more parties as deemed necessary without assigning any reason thereof. The Contractor is bound to accept the portion of work as offered by EPI after split up at the quoted / negotiated rates.

4.1 FOR ITEM RATE TENDERS

4.1.1 The tenderers should quote the rates for items tendered by them in figures as well as in words and the amounts in figures only. The amount for each item should be worked out and the requisite totals and page totals given.

4.1.2 All corrections/cuttings should be signed by the tenderer. Each page of the Tender should be signed by the tenderer. In the event of discrepancy between rate in figures and words the rate quoted in words shall be treated as correct. In case there is discrepancy between rate and amount worked out, the rate quoted shall be taken as correct and not the amount.

4.1.3 Price shall be entered against each item in Bill of Quantities where quantities or LS (lump-sump) has been mentioned. The cost of item against which the Contractor has failed to enter a rate or price shall be deemed to be covered by rates and prices of other items in the Bill of Quantities and no payment shall be made for the quantities executed for items against which rate has not been quoted by Contractor. No rate is to be quoted against items for which no quantity is given. However, the Contractor has to quote rate against “LS” items.

4.2 FOR PERCENTAGE RATE TENDERS

4.2.1. In case of Percentage Rate Tenders, tenderer shall fill up in the Schedule / Bill of Quantities, percentage Below/Above/Par (in figures as well as in words) to total estimated cost given in Schedule / Bill of Quantities, he will be willing to execute the work. The tenderer should quote a unique single percentage plus / minus over the total estimated amount given in Schedule / Bill of Quantities. In case more than one schedule is given, stipulating quoting of separate percentages (plus or minus) over the estimated amount of each schedule, the tenderer can quote separate percentages for each such schedule. Under no circumstances, tenderer is allowed to quote separate percentages for individual items, trades or group of items. In case tenderer quotes separate percentages for individual items, trades or group of items instead of to the total amount of schedule(s), the Tender shall be rejected and earnest money of the tenderer shall be forfeited in totality.

4.2.2 In case of Percentage Rate Tenders, the tenderer shall also work out the total amount of his offer after adding percentage (plus or minus) over the total schedule amount and the same should be written in figures as well as in words in such a way that no interpolation is possible.

4.2.3 In case of Percentage Rate Tenders, only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the tenderer in Percentage Rate Tender shall be accurately filled in figures and words. All corrections/cuttings should be signed by the tenderer. Each page of the Tender should be signed by the tenderer. In the event of discrepancy between percentage rate in figures and words, the percentage rate

quoted in words shall be treated as correct. In case there is discrepancy between percentage rate and amount worked out the percentage rate quoted shall be taken as correct and not the amount. For any other discrepancy, the decision of Tender Scrutiny Committee of EPI shall be final & binding on the tenderer including rejection of Tender and forfeiture of EMD.

5.0 The Tenders shall be strictly as per the conditions of contract. Tenders with any additional condition(s)/modification(s) shall be rejected.

6.0 The witnesses to the Tender / Contract Agreement shall be other than the tenderer / tenderers competing for this work and must indicate full name, address, status/occupation with dated signatures.

7.0 The acceptance of Tender will rest with EPI. Tenders in which any of the prescribed conditions are not fulfilled or found incomplete in any respect are liable to be rejected.

8.0 Canvassing whether directly or indirectly in connection with Tenders is strictly prohibited and the Tenders submitted by the Contractors who resort to canvassing will be liable to rejection.

9.0 On acceptance of Tender, the name of the accredited representative(s) of the Contractor who would be responsible for taking instructions from Engineer-In-Charge or its authorised representative shall be intimated by the Contractor with in 07 days of issue date of telegram / letter / telex / fax of Intent by EPI.

10.0 The tenderer shall not be permitted to Tender for works if his near relative is posted as an Assistant Manager or any higher ranks in the concerned Regional Office of EPI. The Contractor shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any of the officers in EPI. Any breach of this condition by the tenderer would render him liable to the withdrawal of the work awarded to him and forfeiture of Earnest Money and Security Deposit. This may also debar the Contractor from tendering for future works under EPI.

11.0 No employee of EPI of the rank of Assistant Manager and above is allowed to work as a Contractor or as an employee of a Contractor having interest in EPI for a period of two years after his retirement/relief from the service of EPI, without the prior permission of EPI in writing. This contract is liable to be cancelled if either the Contractor or any of his employee is found at any time to be such a person who had not obtained the permission of EPI as aforesaid before submission of the Tender or engagement in the Contractor's service.

12.0 The time of completion of the entire work, as contained in contract shall be as mentioned in "Memorandum" to "Form of Tender", which shall be reckoned from the 10th day from issue of the Letter / Telex / Telegram / Fax of Intent by the EPI.

13.0 The Tender award, execution and completion of work shall be governed by Tender Documents consisting of (but not limited to) Letter of Intent / Letter of work Order, Bill of Quantities, Additional Conditions of Contract, General Conditions of Contract, Specifications, Drawings, etc. The tenderers shall be

deemed to have gone through the various conditions and clauses of the Tender and visited the Site and satisfied itself with Site conditions including sub-soil water conditions, topography of the land, drainage and accessibility etc. or any other condition which in the opinion of Contractor will affect his price / rates before quoting their rates. No claim whatsoever against the foregoing shall be entertained by EPI.

14.0 The Drawings given with the Tender Documents are TENDER DRAWINGS and are indicative only.

15.0 Transfer of bid documents purchased by one intending bidder to another is not permissible.

16.0 Tenders must be duly signed with date and sealed. An attested copy of power of attorney/affidavit/Board Resolution executed as under shall accompany the 'Tender Documents'.

a) In case of Sole Proprietorship, an affidavit of Sole Proprietorship and if the Tender is signed by any other person Power of Attorney by the Sole Proprietor in favour of signatory.

b) In case of Partnership firm, if Tender is not signed by all the partners, Power of Attorney in favour of the Partner/person signing the tender/documents by all the partners authorizing him to sign the tender/documents.

c) In case of Company, copy of the Board Resolution authorizing the signatory to sign on behalf of the Company.

17.0 Tenders with following discrepancies are liable for rejection:-

a) Tenders with over-written or erased rates, percentages, amounts or rates, percentages not written in both figures and words.

b) Tender that is incomplete, ambiguous, and not accompanied by the documents asked for or submitted without EMD or with inadequate EMD.

c) Tender received after specified date/time whether due to postal or other delays.

d) Tender in respect of which canvassing in any form is resorted to by the tenderer whatsoever.

e) If the tenderer deliberately gives wrong information in his tender or resorts to unfair methods in creating circumstances for the acceptance of his tender, EPI reserves the right to reject such tender at any stage.

18.0 Submission of a tender by the tenderer implies that he has read the complete contract documents and has made himself aware of the scope, terms & conditions and specifications of the work to be done and of conditions at which stores, tools, plant, etc. will be issued to him by EPI (if any), local conditions and

political situations and other factors having bearing on the execution of the works. No claim of Contractor whatsoever, within the purview of this clause, shall be entertained at any stage of the project.

19.0 Tenderer shall submit the following documents along with their Tenders in the first envelope (Techno-Commercial Bid) :-

a) List of works executed during the last 5 years indicating name of the Client, value, date of start and completion.
b) List of works under execution indicating name of the Client, Total Contract Value, Value of balance work in hand, date of start and completion.
c) Details of similar works executed.
d) Audited balance sheets and profit and loss accounts alongwith schedules for the last 3 years.
e) Copy of latest income-tax returns filed along with PAN.
f) Details of manpower available.
g) Details of equipments, tools and plant available.
h) Credentials and completion certificates.
i) Registration Certificate/Memorandum and Articles of Association/Partnership Deed/ Affidavit.
j) Copy of Provident Fund Number allotted by PF authorities.
k) Copy of letters of registration with various authorities like CPWD, State PWD, MES and Public Sector Undertakings, etc.
l) Latest Solvency certificate from Nationalised/Scheduled Bank.
m) Latest Sales Tax Registratin and Clearance Certificate.
n) Any other document as stipulated above and in “Tender Documents’

20. Purchase Preference may be granted to the Central Public Sector Enterprises as per the applicable guidelines in force in this regard issued by the Government of India.

LETTER OF UNDERTAKING

(TO BE ENCLOSED IN ENVELOPE-1 ALONGWITH EMD)

ENGINEERING PROJECTS (INDIA) LIMITED

(Address of submission as mentioned in "Notice Inviting Tender")

REF. : **TENDER FOR** (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

Sir,

UNDERTAKING FOR ACCEPTANCE OF TENDER CONDITIONS

1. The Tender Documents for the work as mentioned in "Memorandum" to "Form of Tender" have been issued to me / us by ENGINEERING PROJECTS (INDIA) LIMITED and I / We hereby unconditionally accept the tender conditions and Tender Documents in its entirety for the above work.

2. The contents of clause 1.2 and 1.3 of the Tender Documents (Instructions to Tenderers) have been noted wherein it is clarified that after unconditionally accepting the tender conditions in its entirety, it is not permissible to put any remark(s) / condition(s) (except unconditional rebate on price, if any) in the 'Price-Bid' enclosed in "Envelope-2" and the same has been followed in the present case. In case this provision of the Tender is found violated at any time after opening "Envelope-2", I / We agree that my/our tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy be at liberty to forfeit the full said Earnest Money absolutely.

3. The required Earnest Money for this work is enclosed herewith.

Yours faithfully,

(Signature of the Tenderer)

Seal of Tenderer

Dated :_____

FORM OF TENDER

To,

Engineering Projects (India) Limited
(Address of submission as mentioned in "Notice Inviting Tender")

REF. : **TENDER FOR** (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

1. I/We hereby tender for execution of work as mentioned in "Memorandum" to this "Form of Tender" as per Tender Documents within the time schedule of completion of work as per separately signed and accepted rates in the Bill of Quantities quoted by me / us for the whole work in accordance with the Notice Inviting Tender, Conditions of Contract, Specifications of materials and workmanship, Bill of Quantities Drawings, Time Schedule for completion of jobs, and other documents and papers, all as detailed in Tender Documents.

2. It is agreed that the time stipulated for jobs and completion of works in all respects and in different stages mentioned in the "Time Schedule for completion of jobs" and signed and accepted by me/us is the essence of the contract. I/We agree that in case of failure on my/our part to strictly observe the time of completion mentioned for jobs and the final completion of works in all respects according to the schedule set out in the said "Time Schedule for completion of jobs" and stipulations contained in the contract, the recovery shall be made from me/us as specified therein. In exceptional circumstances extension of time which shall always be in writing may, however be granted by EPI at its entire discretion for some items, and I/We agree that such extension of time will not be counted for the final completion of work as stipulated in the said " Time schedule of completion of jobs".

3. I/We agree to pay the Earnest Money, Security Deposit cum Performance Guarantee, Retention Money and accept the terms and conditions as laid down in the "Memorandum" to this "Form of Tender".

4. Should this Tender be accepted, I/We agree to abide by and fulfill all terms and conditions referred to above and as contained in Tender Documents elsewhere and in default thereof, allow EPI to forfeit and pay EPI, or its successors or its authorized nominees such sums of money as are stipulated in the Tender Documents.

5. I/We hereby pay the earnest money amount as mentioned in the "Memorandum" to this "Form of Tender" in favour of Engineering Projects (India) Limited payable at place as mentioned in the "NIT/ITT".

6. If I/we fail to commence the work within 10 days of the date of issue of Letter of Intent and / or I/We fail to sign the agreement as per Clause 84 of General Conditions of Contract and/or I/We fail to submit Security Deposit cum Performance Guarantee as per Clause 9.0 & 9.1 of General Conditions of Contract, I/We agree that EPI shall, without prejudice to any other right or remedy, be at liberty to cancel the Letter of Intent and to forfeit the said earnest money as specified above.

7. I/We are also enclosing herewith the Letter of Undertaking on the prescribed pro-forma as referred to in condition of NIT.

Date the _____ day of _____

SIGNATURE OF TENDERER

NAME (CAPITAL LETTERS) : _____

OCCUPATION _____

ADDRESS _____

_____

SEAL OF TENDERER

MEMORANDUM

(ENCLOSURE TO FORM OF TENDER**)**

REF. : **TENDER FOR** (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

Sl. No.	Description	Cl. No.	Values / Description to be applicable for relevant clause(s)
i)	Name of work		_____ _____
ii)	Owner/Client / Employer		_____
iii)	Type of Tender		_____
iv)	Earnest Money Deposit	NIT	Rs._____ (Rupees_____ _____ only).
v)	Estimated Cost	NIT	Rs._____ (Rupees_____ _____ only).
vi)	Time for completion of work	NIT	Total work to be completed in _____ (_____) in accordance with the time schedule of completion of work in the Tender Documents.
vii)	Mobilization Advance	8.0	_____% (_____ Percent) of Contract Value.
viii)	Interest Rate on Mobilization Advance	8.0	Simple Interest Rate of _____%(_____ percent only) per annum.
ix)	Number of Instalments for recovery of Mobilisation Advance	8.0	_____
x)	Schedule of Rates applicable	69.0	Civil Works : _____ Sanitary Works : _____ Electrical Works : _____
xi)	Validity of Tender	4.0	90 (Ninety) Days
xii)	Security Deposit cum Performance Guarantee	9.0	5.00% (Five Percent only) of Contract Value within 10 days from the date of issue of telegram / letter / telex / FAX of Intent of acceptance of Tender.

xiii)	Retention Money	10.0	5.00% (Five percent only) of the contract amount, which shall be deducted in the manner set out in this contract.
xiv)	Time allowed for starting the work	43.0	The date of start of contract shall be reckoned 10 days from the date of issue of telegram / letter / telex / FAX of Intent of acceptance of Tender.
xv)	Defect Liability Period	74.0	12 (Twelve) Months from the date of taking over of works.
xvi)	Arbitration	76	Arbitration shall be as per provisions of Clause no.76 of GCC. The Venue of Arbitration shall be ……
xvii)	Jurisdiction	76.3	Courts in ----------

SIGNATURE OF TENDERER

NAME (CAPITAL LETTERS) : _____

OCCUPATION _____

ADDRESS _____

_____

SEAL OF TENDERER

ENGINEERING PROJECTS (INDIA) LIMITED
(A Govt. of India Enterprise)

GENERAL CONDITIONS OF CONTRACT
AND
LABOUR SAFETY PROVISIONS, MODEL RULES
CONTRACTOR'S LABOUR REGULATIONS
& PRESCRIBED PROFORMAS

GENERAL CONDITIONS OF CONTRACT

1.0 GENERAL

The Contract means the documents forming the Tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of EPI and the Contractor, together with the documents referred to therein including these conditions, the Specifications, Designs, Drawings and Instructions issued from time to time by the Engineer-In-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

1.1 In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them.

1.2 Engineering Projects (India) Limited, hereinafter called 'EPI' proposes to get the works executed as mentioned in the Contract on behalf of Owner/ Client.

1.3 The work will be executed as per Drawings "GOOD FOR CONSTRUCTION" to be released by EPI unless otherwise specified elsewhere in the Tender Documents.

1.4 OTHER DEFINITIONS

a) ENGINEER-IN-CHARGE means the Regional Office In-Charge of EPI himself or an engineer of EPI nominated by the Regional Office In-Charge for supervision and/or project management of the project from time to time.

b) WORKS OR WORK The expression works or work shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.

c) CONTRACTOR The Contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.

d) DRAWINGS mean the Drawings referred to in the Bill of Quantities, specifications and any modifications of such Drawings or such other Drawings as may from time to time be approved or furnished by EPI.

e) SITE means the lands and other places on, under, in or through which the works are to be executed or carried out and any other lands or places provided by EPI or used for the purpose of the agreement.

f) APPROVAL means approved in writing including subsequent written confirmation of previous verbal approval.

g) WRITING means any manuscript typed, written or printed statement under or over signature and/or seal as the case may be.

h) MONTH means English Calendar month. 'Day' means a Calendar day of 24 Hrs each.

i) CONTRACT VALUE means the sum for which the Tender is accepted as per the Agreement/ Letter of Acceptance/ Letter of Intent.

j) LANGUAGE: All documents and correspondence in respect of this contract shall be in English Language. In case of any discrepancy between the English version and the Hindi version of these documents, the provisions contained in the English version shall be applicable.

k) BILL OF QUANTITIES or SCHEDULE OF QUANTITIES means the priced and completed Bill of Quantities or Schedule of Quantities forming part of the Tender.

l) OWNER/ CLIENT / EMPLOYER means the Government, Organization, Authority, Company, Ministry, Department, Society, Cooperative etc. who has awarded the work/ project to EPI and/ or appointed EPI as Implementing / Executing Agency/ Project Manager and/ or for whom EPI is acting as an agent and on whose behalf EPI is entering into the contract and getting the work executed.

m) IMPLEMENTING/ EXECUTING AGENCY means EPI

n) TENDER means the Contractor's priced offer to EPI for the execution and completion of the work and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Intent or Award letter. The word TENDER is synonymous with Bid and the word TENDER DOCUMENTS with "Bidding Documents" or "offer documents".

o) The headings in the clauses/ conditions of Tender Documents are for convenience only and shall not be used for interpretation of the clause/ condition.

p) Words imparting the singular meaning only also include the plurals and vice versa where the context requires. Words imparting persons or parties shall include firms and corporations and organizations having legal capacities.

q) APPROVED INSURANCE COMPANY means any Insurance Company registered with 'Insurance Regulatory & Development Authority' (IRDA) of India and meeting insurance needs of the projects of EPI.

2.0 SITE VISIT AND COLLECTING LOCAL INFORMATION

Before tendering, the tenderer is advised to visit the Site, its surroundings to assess and satisfy themselves about the local conditions such as the working and other constraints at Site, approach roads to the Site, availability of water & power supply, applicability of taxes, duties and levies etc., nature of ground, soil and sub-soil condition, underground water table level, accommodations they may

require etc., river regime, river water levels, other details of river, streams & any other relevant information required by them to execute the complete scope of work. The tenderer may obtain all necessary information as to risks, weather conditions, contingencies & other circumstances (insurgencies etc.) which may influence or affect their tender prices. Tenderer shall be deemed to have considered Site conditions whether he has inspected it or not and to have satisfied himself in all respects before quoting his rates and no claim or extra charges whatsoever in this regard shall be entertained / payable by EPI at a later date.

2.1 ACCESS BY ROAD

Contractor, if necessary, shall build temporary access roads to the actual Site of construction for the works at his own cost to make the Site accessible. The Contractor shall maintain the same in motorable condition at all times as directed by Engineer-In-Charge at his own cost. The Contractor shall be required to permit the use of any roads so constructed by him for vehicles of EPI or any other agencies/ Contractors who may be engaged on the project Site, free of cost.

Non-availability of access roads or approach to Site, for the use of the Contractor shall in no case condone any delay in the execution of work nor be the cause for any claim for compensation.

2.2 HANDING OVER & CLEARING OF SITE

2.2.1 The Contractor should note that area for construction may be made available in phases as per availability and in conjunction with pace of actual progress of work at Site. The work may be required to be carried out in constrained situations. The work is to be carried out in such a way that the traffic, people movement, if any, is kept operative and nothing extra shall be payable to the Contractor due to this phasing / sequencing of the work. The Contractor is required to arrange the resources to complete the entire project within total stipulated time. Traffic diversion, if required, is to be done and maintained as per specification by the Contractor at his own cost and the Contractor shall not be entitled for any extra payment, whatsoever, in this regard.

2.2.2 Efforts will be made by EPI to handover the Site to the Contractor free of encumbrances. However, in case of any delay in handing over of the Site to the Contractor, EPI shall only consider suitable extension of time for the execution of the work. It should be clearly understood that EPI shall not consider any revision in contract price or any other compensation whatsoever viz. towards idleness of Contractor's labour, equipment etc.

2.2.3 The Contractor shall be responsible for removal of all over-ground and under-ground structures (permanent, semi-permanent and temporary) and constructions from the Site. The cost to be incurred in this regard shall be deemed to be included in the quoted rates of Bill of Quantities items and Contractor shall not be entitled for any extra payment whatsoever, in this regard. Old structures on the proposed Site, if required, shall be demolished by the Contractor properly. The useful material obtained from demolition of structures &

services shall be the property of the Owner/EPI and these materials shall be stacked in workmanship like manner at the place specified by the Engineer- in-charge.

2.2.4 If required, the Contractor has to do site clearance, enabling work, barricading, diversion of Roads, shifting/ realignment of existing utility services, drains, nallahs etc. at his own cost as per direction of Engineer-In-Charge and the Contractor shall not be entitled for any extra payment whatsoever in this regard.

2.2.5 Necessary arrangements including its maintenance are to be made by the Contractor for temporary diversion of flow of existing drain and road, as the case may be. The existing drain, road would be demolished, wherever required, with the progress of work under the scope of proposed project. The existing Road and Drain, which are not in the alignment of the said project but are affected and/ or need to be demolished during execution for smooth progress of the project, shall be restored to its original status and condition (including black topping) by the Contractor at his own. The cost to be incurred by Contractor in these regards shall be deemed to be included in the quoted rates of the Bill of Quantities items and Contractor shall not be entitled for any extra payment whatsoever, in these regards.

2.2.6 The Contractor shall be responsible to co-ordinate with service provider/ concerned authorities for cutting of trees, shifting of utilities and removal of encroachments etc. and making the Site unhindered for completion of work. This shall include initial and frequent follow up meetings/ actions/ discussions with each involved service provider/ concerned authorities. The Contractor shall not be entitled for any additional compensation for delay in cutting of trees, shifting of utilities and removal of encroachments by the service provider/ concerned authorities.

2.2.7 The information about the public utilities (whether over ground or underground) like electrical/ telephone/ water supply lines, OFC Cables, sewer lines, open drains etc. is the responsibility of Contractor who has to ascertain the utilities that are to be affected by the works through the site investigation and collection of information from the concerned utility Owners.

2.2.8 The Contractor shall be responsible to obtain necessary approval from the respective authorities for shifting/ re-alignment of existing public utilities. EPI shall only provide necessary letters required for liaisoning by the Contractor in obtaining the approval from the concerned authorities.

2.2.9 Any services affected by the works must be temporarily supported by the Contractor who must also take all measures reasonably required by the various bodies to protect their services and property during the progress of works. It shall be deemed to be the part of the contract and no extra payment shall be made to the Contractor for the same. Shifting/ re-alignment of public utilities should be done without disturbing the existing one. New service lines should be laid and connected before dismantling the existing one.

2.2.10 Shifting/ re-alignment of existing public utilities shall be done by the Contractor as per technical requirement of respective bodies or as per direction of Engineer-In-Charge. Shifting/ re-alignment of public utilities includes all materials, labours,

tools and plants and any other expenses whatsoever for the same. The cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the Contractor shall not be entitled for any extra payment, whatsoever, in this regard. In case any of these services are shifted by the State Govt/ local authorities themselves for which deposit as per their estimates is to be made to them, the Contractor shall deposit the same and the Contractor shall be paid only at the rates quoted by him in BOQ for quantity specified in the BOQ, if such items are included in the BOQ irrespective of amount paid by him to the State Govt./ local authorities for execution of these works. In case such provision is not made in the BOQ or the quantity exceeds those specified in the BOQ, the same is deemed to be included in the rates quoted by him for other items in BOQ and nothing extra shall be payable to Contractor on this account.

3.0 SCOPE OF WORK

3.1 The scope of work covered in this Tender shall be as per the Bill of Quantities, Specifications, Drawings, Instructions, Orders issued to the Contractor from time to time during the pendency of work. The Drawings for this work, which may be referred for tendering, provide general idea only about the work to be performed under the scope of this contract. These may not be the final drawings and may not indicate the full range of the work under the scope of this contract. The work will be executed according to the Drawings to be released as “GOOD FOR CONSTRUCTION” from time to time by the Engineer-In-Charge of EPI and according to any additions/ modifications/ alterations/deletions made from time to time, as required by any other drawings that would be issued to the Contractor progressively during execution of work. It shall be the responsibility of the Contractor to incorporate the changes that may be in the scope of work, envisaged at the time of tendering and as actually required to be executed.

3.2 The quantities of various items as entered in the “BILL OF QUANTITIES” are indicative only and may vary depending upon the actual requirement. The Contractor shall be bound to carry out and complete the stipulated work irrespective of the variation in individual items specified in the Bill of Quantities. The variation of quantities will be governed as per clause No.69 of GCC.

4.0 VALIDITY OF TENDER

The Tender for the works shall remain open for acceptance for a period of ninety days from the date of opening of Price Bid of Tenders. The earnest money will be forfeited without any prejudice to any right or remedy, in case the Contractor withdraws his Tender during the validity period or in case he changes his offer to his benefits, which are not acceptable to EPI. The validity period may be extended on mutual consent.

5.0 ACCEPTANCE OF TENDER

EPI reserves to itself the authority to reject any or all the Tenders received without assigning any reason. The acceptance of a Tender shall be effective w.e.f. the date on which the telegram/ letter of intent or acceptance of the Tender is put in the communication by EPI. EPI also reserves the right to split the work

among two or more parties at lowest negotiated rate without assigning any reason thereof. The Contractor is bound to accept the portion of work as offered by EPI after split up at the quoted/ negotiated rates.

6.0 SET OF TENDER DOCUMENTS:

The following documents will complete a set of Tender Documents.

A) VOLUME I :

a) Instructions to tenderers
b) General Conditions of Contract

B) VOLUME II :

a) Notice Inviting Tenders
b) Additional Conditions of Contract
c) Technical Specifications (General, Additional & Technical specifications)
d) Tender Drawings

C) VOLUME III :

a) Schedule of Rates/ Bills of quantities (Price-Bid)

7.0 EARNEST MONEY DEPOSIT

Earnest Money Deposit (EMD) of amount as mentioned in “Memorandum” to “Form of Tender” required to be submitted along with the Tender shall be in the form of Demand Draft payable at place as mentioned in “Notice Inviting Tender”/ “Instructions to Tenderers” in favour of ‘Engineering Projects (India) Limited’ from any Nationalised bank / Scheduled Bank or in the form of Bank Guarantee from any Nationalised bank / Scheduled Bank as per the enclosed format. The EMD shall be valid for minimum period of 150 days (One hundred fifty Days) from last day of submission of Tender.

7.1 EMD shall accompany the offer and placed in the sealed envelope cover of the offer as detailed in Instructions to Tenderer. Any tender not accompanied with the requisite Earnest Money Deposit alongwith ‘Letter of Undertaking’ shall be rejected and such tenderer(s) will not be allowed to attend the opening of bids.

7.2 The EMD of all unsuccessful tenderers (i.e. except evaluated lowest tenderer) shall be returned within Seven (7) days of the opening of price bids by EPI. Subject to clause 7.6 herein below, EMD of successful tenderer shall be refunded after submission of Security Deposit cum Performance Guarantee by him.

7.3 Once the tenderer has given an unconditional acceptance to the tender conditions in its entirety, he is not permitted to put any remark(s)/conditions(s) (except unconditional rebate on price, if any) in/ along-with the Tender.

7.4 In case the condition 7.3 mentioned above is found violated at any time after opening of Tender, the Tender shall be summarily rejected and EPI shall, without

prejudice to any other right or remedy, be at liberty to forfeit the full said Earnest Money absolutely.

7.5 No interest will be payable by EPI on the said amount covered under EMD/Other security documents.

7.6 EMD of successful tenderer, if deposited in the form of Demand Draft, shall be treated as part of Retention Money.

7.7 At any time after the due date of the Tender, if any tenderer alters /modifies/withdraws his tender within the validity period (or the extended validity period) of his tender or fails to furnish the "Security Deposit cum Performance Guarantee" or the "Additional Performance Guarantee" or fails to execute the "Contract Agreement" within the prescribed time period after the placement of LOI on him, EPI without prejudice to any other rights or remedies shall be at liberty to forfeit the Earnest Money deposited by the tenderer. In the event of re-tender, such tenderer shall not be allowed to submit tender

8.0 MOBILIZATION ADVANCE

8.1 Mobilization advance up to maximum of amount as mentioned in the "Memorandum" to the "Form of Tender" shall be paid to the Contractor on submission of non-revocable and unconditional Bank Guarantee of an equivalent amount in case of interest free Mobilization Advance or for an amount equal to 110% of the Mobilization Advance in case of interest bearing Mobilization Advance, from a Nationalized Bank / Scheduled Bank as per the enclosed Performa subject to conditions given hereunder. The Mobilization Advance shall be at the Interest Rate as mentioned in the "Memorandum" to the "Form of Tender". This advance shall be paid in three installments as follows: -

i) First Installment of fifty percent of total mobilization advance shall be paid after fulfillment of the following conditions:

a) Signing of the agreement.
b) Submission of Security Deposit cum Performance Guarantee as per Clause No. 9.

ii) Second installment of twenty five percent of total mobilization advance will be paid after the setting up of site office and providing facilities to EPI as per contract, and completion of enabling works required for taking up the construction. These include construction of store, labour hutments, etc.

iii) The balance twenty five percent of total mobilization advance shall be paid on mobilization of manpower, plant & equipment etc. to the satisfaction of Engineer-In-Charge of EPI.

8.2 The Advance shall be recovered on monthly installment basis. The installments shall commence when 20% of the scheduled contract period has elapsed and fully recovered when 80% of the scheduled contract period is over, both from

date of start. (The month of start & completion of recovery of mobilization advance to be rounded off to nearest full month).

8.3 Part 'Bank Guarantees' (BGs) against mobilization advance shall be furnished in as many numbers as the number of recovery installments as given in "Memorandum" to the "Form of Tender" and should be equivalent to the amount of each recovery installment. At any point of time, if the Contractor's payable amount on account of work done is not available with EPI or the amount payable is less than the recovery installment, recovery of such advance shall be effected by encashing the BG of equivalent recovery amount. The decision of EPI in this regard shall be final and binding on the Contractor. The validity period for the part BGs shall be till three months after the end of the month in which instalment is due to be recovered with further three months claim period.

8.4 In case recovery of Mobilization Advance is delayed, interest shall be charged @12% (Twelve percent) per annum on delayed recoveries due to late submission of bills by the Contractor or due to delayed encashment of Bank Guarantee, as stated above or due to any other reasons whatsoever.

8.5 Contractor is required to furnish the Utilization Certificate for each installment of mobilization advance to the satisfaction of Engineer-In-Charge. Subsequent installments of mobilization advance shall be released only after getting satisfactory utilisation certificate from the Contractor for the earlier released installment.

8.6 Notwithstanding what is contained in aforesaid clauses, no mobilization advance whatsoever shall be payable, if payment of mobilization advance is not mentioned in the "Memorandum" to the "Form of Tender".

9.0 SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE

"Within 10 (ten) days from the date of issue of letter of Intent or within such extended time as may be granted by EPI in writing, the Contractor shall submit to EPI a Security Deposit cum Performance Bank Guarantee in the form appended, from any Nationalised bank / Scheduled Bank equivalent to 5% (five percent only) of the Contract Value for the due and proper execution of the contract. This bank guarantee shall remain valid up to 90 (ninety) days after the end of defects liability period.

In case the Contractor fails to submit the Security Deposit cum Performance Guarantee of the requisite amount within the stipulated period or extended period, letter of intent will stand withdrawn and EMD of Contractor shall be forfeited.

9.1 ADDITIONAL PERFORMANCE GUARANTEE FOR EXISTING CONTRACTORS

In case bidder is a working Contractor of EPI at the time of issuance of Letter of Intent (LOI) for the work, the bidder has to furnish an additional Performance Guarantee of 1% (One Percent) of the Contract Value of the work, in case working capacity of the bidder is less than the aggregate of balance work-load of all the works of the bidder with EPI as on date of placement of LOI for this work. The balance workload shall also include the value of work awarded but not yet

started and finally approved value of this work. This additional Performance Guarantee shall be in addition to the Security Deposit cum Performance Guarantee of the works to be furnished by the bidder as specified in the clause no. 9 of General Conditions of Contract. Further, no relaxation in Security Deposit cum Performance Guarantee as in clause no. 9 of General Conditions of Contract shall be made in case working capacity works-out to be more than the balance value of works as mentioned above. The working capacity of the Contractor shall be calculated as under:

WORKING CAPACITY = 2.5 X (Average Turnover of the party as per latest three audited Balance Sheets).

NOTE: The decision of amount of additional Performance Guarantee as above shall be taken by EPI and shall be final & binding to the Contractor.

In case the Contractor fails to submit the additional performance guarantee of the requisite amount within 10 days from the date of issue of letter of Intent or within such extended time as may be granted by EPI in writing, the letter of intent will stand withdrawn and EMD of the Contractor shall be forfeited.

9.2 ABNORMALLY HIGH AND LOW RATED ITEMS

For item rate tenders if, the rates quoted by the lowest bidder for certain items of the Bill of Quantities of the Tender are found to be abnormally high or low in comparison to the Market Rate analysis of the item done by EPI and/or in comparison to EPI's method of working out market rate justification for the items, the same shall be governed as under: -

For Abnormally High Rated items (AHR), the progressive payment shall be 80% (Eighty percent) of the payment due to the Contractor against execution of the AHR items. The balance withheld 20% (twenty percent) payment shall be released after 80% of total value of the original contract is completed in financial terms in order to ensure that the Abnormally Low Rated (ALR) items identified at the time of Award of work have been executed as per requirement of project and as per terms of Contract. Further, deviation limit for AHR items shall be nil on plus side and 100% on minus side. The provision of deviation limit of clause 69.1(v) shall not apply to AHR items. In case of deviation of quantities given in schedule of quantities for AHR items on plus side, the same shall be governed by clause 69.2. The decision of Engineer-In-Charge of EPI in this regard shall be final and binding on the Contractor.

The provision of para 9.2 shall not be applicable on tenders invited on Percentage Rate/lump Sum basis.

The decision of EPI on identification/marking of AHR and ALR items is final and binding on the Contractor. In case the Contractor does not agree to the identified AHR and ALR items, at the time of award of works, the EMD/Security Deposit cum Performance Guarantee of the Contractor shall be forfeited and decision of EPI in this regard shall be final & binding on the Contractor.

10.0 RETENTION MONEY

The Retention Money shall be deducted from each running bill of the Contractor at 5% (five percent only) of the gross value of the Running Account bill. The Earnest Money Deposited by the tenderer in the form of Demand Draft will be treated as part of the Retention Money. The Retention Money shall be refunded to the Contractor after expiry of defects liability period (referred to in Clause No. 74) or on payment of the amount of the final bill whichever is later. If the amount of Retention Money deduction in cash is more than Rs.10.00 lakhs (Rupees Ten lakhs only), the excess amount can be refunded to Contractor against submission of Bank Guarantee of equivalent amount from a Nationalised bank / Scheduled Bank in the prescribed proforma of Performance Guarantee of EPI.

11.0 MOBILIZATION OF MEN, MATERIALS AND MACHINERY:

11.1 All expenses towards mobilization at Site and de-mobilization including bringing in equipment, work force, materials, dismantling the equipments, clearing the Site etc. shall be deemed to be included in prices quoted and no separate payment on account of such expenses shall be entertained.

11.2 It shall be entirely the Contractor’s responsibility to provide, operate and maintain all necessary construction equipments, scaffoldings and safety gadget, lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all jobs as per the specifications and within the schedule time of completion of work. Further, Contractor shall also be responsible for obtaining temporary electric and water connection for all purposes. The Contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

11.3 It shall be the responsibility of the Contractor to obtain the approval for any revision and/ or modification desired by him from EPI before implementation. Also such revisions and/or modifications if accepted / approved by EPI shall be carried at no extra cost to EPI.

11.4 The procurement and supply in sequence and at the appropriate time of all materials and consumable shall be entirely the Contractor’s responsibility and his rates for execution of work shall be inclusive of supply of all these items.

11.5 It is mandatory for the Contractor to provide safety equipments and gadgets to its all workers, supervisory and Technical staff engaged in the execution of the work while working. The minimum requirement (but not limited to) shall be gumboots, safety helmets, Rubber hand gloves, facemasks, safety nets, belts, goggles etc. as per work requirements. Sufficient nos. of these equipments and gadgets shall also be provided to EPI by the Contractor at his own cost for use of EPI Officials and/ or workforce while working/ supervision at Site. No staff/ worker shall be allowed to enter the Site without these equipments/ gadgets. The cost of the above equipments/ gadgets are deemed to be included in the rates quoted by the Contractor for the items & works as per Bill of Quantities and Contractor shall not be entitled for any extra cost in these regard. The above norm is to be strictly complied with at Site. In case the Contractor is found to be deficient in providing Safety Equipments/ Gadgets in the opinion of Engineer-In-Charge, the Engineer-In-Charge at his option can procure the same at the risk & cost of Contractor and provide the same for the use of worksite and shall make the recoveries from the bills of the Contractor for the same. The decision of the Engineer-In-Charge shall be final and binding on Contractor in this regard.

11.6 All Designs, Drawings, Bill of Quantities, etc. (except Bar Bending Schedule, Shop & Fabrication Drawings) for all works shall be supplied to the Contractor for all buildings services and development works by EPI in phased manner as the works progress. However it shall be the duty and responsibility of the Contractor to bring to the notice of EPI in writing as to any variation, discrepancy or any other changes required and to obtain revised drawings and designs and / or approval of EPI in writing for the same.

11.7 One copy of contract documents including Drawings furnished to the Contractor shall be kept at the Site and the same shall at all reasonable times be available for inspection.

11.8 All materials, construction plants and equipments etc. once brought by the Contractor within the project area, will not be allowed to be removed from the premises without the written permission of EPI. Similarly all enabling works built by the Contractor for the main construction undertaken by him, shall not be dismantled and removed without the written authority of EPI.

11.9 Contractor shall have to prepare the Bar Bending Schedule, Shop and Fabrication Drawings free of cost, if required for any of the items of work. Five copies of these Drawings each including for revision will be submitted to EPI for approval. Before executing the item, Bar Bending Schedule, Shop & Fabrication Drawings should be got approved from EPI.

12.0 INCOME TAX DEDUCTION

Income tax deductions shall be made from all payments made to the Contractor including advances against work done, in accordance with the Income Tax act prevailing from time to time.

13.0 TAXES AND DUTIES

13.1 The Contractor shall be responsible for the payment, wherever payable, at his own cost of all taxes such as excise duty, custom duty, sales tax, including the purchase tax, consignment tax, work contract tax, service tax, VAT or any other similar tax in the state concerned, turnover tax, toll tax, octroi charges, royalty, cess, levy and other tax (es) or duty (ies) which may be specified by local/ state/ central government from time to time on all materials, articles which may be used for this work. The rates quoted by him in the Tender in Bill of Quantities shall be inclusive of all such taxes, duties, etc. The imposition of any new and/ or increase in the aforesaid taxes, duties, levies (including fresh imposition of Work Contract Tax, Turnover Tax, Sales Tax on Work Contract, VAT or any other similar Tax) etc. during the currency of the contract shall be borne by Contractor and shall not be paid or reimbursed to the Contractor by EPI. In the event of non-payment/default in payment of any octroi, royalty, cess, turnover tax, sales tax, including the purchase tax, consignment tax, work contract tax, VAT, Service Tax or any other similar tax in the state concerned, customs, excise or any other levy/tax including labour dues etc. by Contractor, EPI reserves the right to with-hold the dues/ payments of Contractor and make payment to local/state/ Central Government authorities or to labourers as may be applicable. The Contractor should submit along with the Tender Registration Certificates with Sales Tax on works contract authority etc. other wise appropriate recovery shall be made from his bills.

13.2 The rate quoted by the Contractor shall be deemed to be inclusive of all Taxes and duties as mentioned in clause no.13.1 given above or any other tax as applicable and the same shall not be reimbursed by EPI. Tax deductions at source shall be made as per laws prevalent in the State.

13.3 The stamp duty and registration charges, if any, on the contract agreement levied by the Government or any other statutory body, shall be paid by the Contractor.

13.4 It will be incumbent upon the Contractor to obtain a registration certificate as a dealer under the Local Sales Tax Act and the Central Sales Tax Act, Service Tax, etc. and necessary evidence to this effect shall be furnished by the Contractor to EPI. Sales Tax on the transactions between the Contractor and his Sub-Contractor/Vendors etc. shall be borne by the Contractor. The Contractor shall be responsible for any taxes that may be levied hereunder on the transaction between Contractor and EPI.

13.5 The bidder shall quote his rates inclusive of Turnover Tax/ Sales Tax on Works Contract payable to State Govt. along-with other taxes, duties, levies etc. in conjunction with other terms and conditions. In case, the Turnover Tax/ Sales Tax on Works Contract on execution of works is waived off by the State Govt. at later stage for this project, the equivalent amount from the date of waiver of such tax (as per prevailing rate as on the date of waiver of Turnover Tax/ Sales Tax on Works Contract) shall be deducted from the amount payable to the Contractor from subsequent RA Bills.

13.6 VALUE ADDED TAX (VAT)

The consideration agreed for the execution of said contract shall include the taxes, duties, cess, etc. such as excise duty, service tax, VAT, which is leviable or may be levied in future under any State Law or the Central Law on execution of said contract, such taxes shall be borne by the Contractor and shall not be reimbursed by EPI. Further, if due to any variance in such tax, duties, cess etc. there is any increase in the taxes, the same shall also be borne by the Contractor. Where under any of the State or the Central Law, there is requirement of deduction of tax at source, the same shall be deducted from the amount paid or payable to the Contractor pursuant to this contract and shall be deposited to the Government authorities by EPI. EPI shall issue the documents/forms/ certificate as prescribed under the relevant law, in respect of the amount so deducted from the amount paid or payable to the Contractor. EPI shall have full rights to withhold the amount payable to the Contractor in pursuant to this contract, if Contractor does not fulfill his obligation under any State or Central Law relating to execution of said contract, in case the amount has already been paid by EPI, EPI has the right to recover such payments from the Contractor.

14.0 ROYALTY ON MATERIALS:

The Contractor shall deposit royalty and obtain necessary permit for supply of bajri, stone, kankar, sand, etc. from the local authorities and quoted rates shall be inclusive of royalty.

15.0 RATES TO BE FIRM

15.1 The rates quoted by the tenderer shall be firm and fixed for the entire period of completion and till handing over of the work. No revision to rates or any escalation shall be allowed on account of any increase in prices of materials, labour, POL and Overheads etc or any other statutory increase during the entire contract period or extended contract period.

15.2 The Contractor shall be deemed to have inspected the Site, its surrounding and acquainted itself with the nature of the ground, accessibility of the Site and full extent and nature of all operations necessary for the full and proper execution of the contract, space for storage of materials, construction plant, temporary works, restrictions of working time, restrictions on the plying of heavy vehicles in area, supply and use of labour, materials, plant, equipment and laws, rules and regulations, if any, imposed by the local authorities.

15.3 The rates and prices to be tendered in the Bill of Quantities are for completed and finished items of works complete in all respects. It will be deemed to include all construction plant, labour, supervision, materials, transport, all temporary works, erection, maintenance, Contractor's profit and establishment/ overheads, together with preparation of designs & drawings pertaining to casting yard, shop drawing, fabrication drawing (if required), staging form work, stacking yard, etc. all general risk, taxes, royalty, duties, cess, octroi and other levies, insurance,

liabilities and obligations set out or implied in the Tender Documents and contract.

15.4 Unless otherwise specified in the Bill of Quantities (BOQ), the Contractor has to make his own arrangement for dewatering/ bailing out of water, effluent including strutting, shoring etc at every stage of work wherever required (including Tunnel work) including working under foul condition as per direction of Engineer-In-Charge at his own cost and the Contractor shall not be entitled for any extra payment, whatsoever, in this regard.

15.5 If required to make work site suitable for execution, Contractor shall have to clear jungle including of rank vegetation, grass, trees etc., clear & clean existing drains/ canals (including strutting, shoring and packing cavities) and dispose them out of the Site up-to any lead and lift as per direction of Engineer-In-Charge. The Contractor should inspect the Site of work from this point of view. Unless otherwise specified in the Bill of Quantities, the cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the Contractor shall not be entitled for any extra payment in this regard.

15.6 If any temporary/ permanent structure is encountered or safety of such structure in the vicinity is endangered due to execution of the project, the Contractor has to protect the structures by any means as per direction of Engineer - in – Charge. If any damage caused to any temporary or permanent structure(s) in the vicinity is caused due to execution of the project, the Contractor has to make good the same by any means as per direction of Engineer - in – Charge. The Contractor should inspect the Site of work from this point of view. The cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the Contractor shall not be entitled for any extra payment in this regard.

16.0 ESCALATION / PRICE VARIATION

No claim on account of any Price Variation / Escalation on whatsoever ground shall be entertained at any stage of works. All rates as per Bill of Quantities (BOQ)/Price-Bid quoted by Contractor shall be firm and fixed for entire contract period as well as extended period for completion of the works. No escalation/price variation clause shall be applicable on this contract.

17.0 INSURANCE OF WORKS ETC.

Contractor is required to take Contractor's All Risk Policy or Erection All Risk Policy (as the case may be) including Marine Insurance from an Approved Insurance Company in the joint name with EPI and bear all costs towards the same for the full period of execution of works including the defect liability period for the full amount of contract against all loss or damage from whatever cause arising for which he is responsible under the terms of the contract and in such manner that EPI and the Contractor are covered during the period of construction of works and/or also covered during the period of defect liability for the loss or damage as under:

a. The work and the temporary works to the full value of such works.

b. The materials, construction plant, centering, shuttering and scaffolding materials and other things brought to the Site for their full value. Whenever required by EPI, the Contractor shall produce the policy or the policies of insurance and the receipts for payment of the current premiums.

18.0 INSURANCE UNDER WORKMEN'S COMPENSATION ACT

Contractor is required to take insurance cover as per requirement of the Workmen's Compensation Act, 1923 amended from time to time from an Approved Insurance Company and pay premium charges thereof. Wherever required by EPI the Contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

19.0 THIRD PARTY INSURANCE

Contractor is required to take third party insurance cover for an amount of 5% (five percent) of Contract Value from an Approved Insurance Company for insurance against any damage, injury or loss which may occur to any person or property including that of EPI, arising out of the execution of the works or temporary works. Wherever required by EPI the Contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

In case of failure of the Contractor to obtain insurance for works, insurance under Workman Compensation Act and Third Party insurance as described above within one month from the date of commencement of work, running account payments of the Contractor shall be withheld till such time the aforesaid insurance covers are obtained by the Contractor.

20.0 INDEMNITY AGAINST PATENT RIGHTS

The Contractor shall fully indemnify EPI from and against all claims and proceedings for or on account of any infringement of any patent rights, design, trademark or name or other protected rights in respect of any construction plant, machine, work or material used for in connection with the works or temporary works.

21.0 LABOUR LAWS TO BE COMPLIED WITH BY THE CONTRACTOR

The Contractor shall obtain a valid licence under the contract labour (Regulation & Abolition) Act 1970 and the Contract Labour Act (R&A) Central Rules 1971 and amended from time to time, and continue to have a valid licence until the completion of the work including defect liability period. The Contractor shall also abide by the provision of the child labour (Prohibition and Regulation) Act. 1986 and as amended from time to time. Any failure to fulfill this requirement shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, Workmen's Compensation Act, 1923, Maternity Benefit Act, 1961 and Mines Act -1932, Industrial Disputes Act, 1947 or any modifications thereof or any other law relating thereto and rules made there under from, time to time.

21.1 No labour below the age of 18 years shall be employed on the work.

22.0 LABOUR SAFETY PROVISION

The Contractor shall be fully responsible to observe the labour safety provisions.

23.0 OBSERVANCE OF LABOUR LAWS

23.1 The Contractor shall be fully responsible for observance of all labour laws applicable including local laws and other laws applicable in this matter and shall Indemnify and keep indemnified EPI against effect of non observance of any such laws. The Contractor shall be liable to make payment to all its employees, workers and sub-Contractors and make compliance with labour laws. If EPI or the Client/ Owner/ Employer is held liable as “Principal Employer” to pay any amount or contributions etc. under legislation of Govt. or Court decision in respect of the employees of the Contractor, then the Contractor would reimburse the amount of such payments, contribution etc. to EPI and/ or same shall be deducted from the payments, Retention Money etc. of the Contractor.

23.2 The Contractor shall submit proof of having valid EPF registration certificate. In absence of the said certificate payment to the extent of 4.70% (four point seven percent) of the value of all the Running Account bills may be withheld by EPI and shall be released only after the production of the EPF registration certificate from the concerned authorities. If it is incumbent upon EPI to deposit withheld amount with EPF authorities, the withheld amount shall be deposited by EPI with EPF authorities. In such a case EPI shall not refund this withheld amount to the Contractor even after the production of EPF registration certificate.

23.3 The Contractor shall be liable to pay cess levied under the Building and other Construction Workers Welfare Cess Act, 1996, at such rates as may be notified by the Government from time to time. EPI shall deduct at source from every Running Account Bill of the Contractor, the said cess, at such rates for the time being prevailing, which shall not exceed 2% (two percent) but not be less than 1% (one percent) of the cost of construction incurred by EPI.

24.0 LAWS GOVERNING THE CONTRACT

This contract shall be governed by the Indian Laws for the time being in force and amended from time to time.

25.0 LAWS, BYE LAWS RELATING TO THE WORK

The Contractor shall strictly abide by the provisions, for the time being in force, of law relating to works or any regulations and bye laws made by any local authority or any water & lighting agencies or any undertakings within the limits of the

jurisdiction of which the work is proposed to be executed. The Contractor shall be bound to give to the authorities concerned such notices and take all approvals as may be provided in the law, regulations or bye laws as aforesaid, and to pay all fees and taxes payable to such authorities in respect thereof.

26.0 EMPLOYMENT OF PERSONNEL

26.1 The Contractor shall employ only Indian Nationals as his representatives, servants and workmen after verifying their antecedents and loyalty. He shall ensure that no personnel of doubtful antecedents & integrity and any other nationality in any way are associated with the works.

26.2 EPI shall have full power to get removed immediately any representative, agent, servant and workmen or employees of the Contractor on account of misconduct, negligence or incompetence or whose continued employment may in the opinion of the Engineer-In-Charge be undesirable without assigning any reason for the removal. The Contractor shall not be allowed any compensation on this account whatsoever.

27.0 TECHNICAL STAFF FOR WORK

27.1 The Contractor shall employ at his cost the adequate number of technical staff during the execution of this work depending upon the requirement of work. For this purpose the numbers to be deployed, their qualification, experience as decided by EPI shall be final and binding on Contractor. The Contractor shall not be entitled for any extra payment in this regard. The technical staff should be available at Site, whenever required by EPI to take instructions.

27.2 Within 15 days from the date of letter of intent, the Contractor shall submit a site organizational chart and Resume including details of experience of the Project-in-Charge and other staff proposed by him and shall depute them on the Project after getting approval from Engineer-In-Charge. If desired by the Contractor at later date, the Project-in-Charge and other staff whose resume is approved by EPI can be replaced with prior written approval of EPI and replacement shall be with equivalent or superior candidate only. Decision of Engineer-In-Charge shall be final and binding on the Contractor.

Even after approving the site organizational chart, the Engineer-In-Charge due to nature and exigency of work can direct the Contractor to depute such additional staff as in view of Engineer-In-Charge is necessary and having qualification and experience as approved by the Engineer-In-Charge. The removal of such additional staff from the Site shall only be with the prior written approval of Engineer-In-Charge. The Contractor shall not be paid anything extra whatsoever on account of deployment of additional staff and decision of the Engineer-In-Charge shall be final and binding on the Contractor.

27.3 In case the Contractor fails to employ the staff as aforesaid, he shall be liable to pay a reasonable amount not exceeding a sum of Rs. 25,000 (Rupees Twenty Five Thousand only) for each month of default in the case of each person. The

decision of the Engineer-In-Charge as to number of Technical Staff to be adequate for the project and the period for which the required technical staff was not employed by the Contractor and as to the reasonableness of the amount to be deducted on this account shall be final and binding on the Contractor.

28.0 LAND FOR LABOUR HUTS/ SITE OFFICE AND STORAGE ACCOMMODATION

28.1 The Contractor shall arrange the land for temporary office, storage accommodation and labour huts at his own cost and get the clearance of local authorities for setting up of labour camp and cost of same is deemed to be included in the rates quoted by the Contractor for the works. The Contractor shall ensure that the area of labour huts is kept clean and sanitary conditions are maintained as laid down by the local authorities controlling the area. The labour huts shall be so placed that it does not hinder the progress of work or access to the worksite. The vacant possession of the land used, for the purpose shall be given back by Contractor after completion of the work. The Retention Money of the Contractor shall be released only after Contractor demolishes all structures including foundations and gives back clear vacant possession of this land.

28.2 In the event the Contractor has to shift his labour camp at any time during execution of the work on the Instructions of local authorities or as per the requirement of the work progress or as may be required by EPI, he shall comply with such instructions at his cost and no claim whatsoever shall be entertained on this account.

28.3 **FURNISHED OFFICE ACCOMMODATION & MOBILITY AND COMMUNICATION TO BE PROVIDED BY CONTRACTOR TO EPI**

On acceptance of Tender, the Contractor at his own cost will construct a suitable furnished office at Site equipped with basic facilities such as telephone(s), fax, internet, photocopier, computer(s) & printer(s) alongwith operator(s), regular electricity & drinking water supply and vehicles for staff etc. as per the requirement of the project. The Contractor shall provide consumable as required and maintain the aforesaid facilities intact/operational during the currency of the contract including the defects liability period. The Contractor shall also make sufficient arrangement for photography/ videography preferably by maintaining a camera/video camera at Site so that photographs video can be taken of any specific activity at any point of time. The Contractor shall also provide software like MS Project etc. for the purpose of preparing progress report, etc.

28.4 The Contractor shall make all arrangements for ground breaking ceremony/ inaugural function etc for the project as required and the cost towards it is deemed to be included in his rates/offer. Any expenditure already incurred/to be incurred by EPI, shall be recovered from the Contractor.

28.5 **PROTECTION OF TREES**

Trees designated by the Engineer-In-Charge shall be protected from damage during the course of the works and earth level within one meter of each such tree shall not

be changed. Where necessary, such trees shall be protected by providing temporary fencing.

29.0 WATCH & WARD AND LIGHTING

The Contractor shall at his own cost take all precautions to ensure safety of life and property by providing necessary barriers, lights, watchmen etc. during the progress of work as directed by Engineer-In-Charge.

30.0 HEALTH & SANITARY ARRANGEMENTS

In case of all labour directly or indirectly employed in work for the performance on the Contractor's part of this contract, the Contractor shall comply with all rules and regulations framed by Govt. from time to time for the protection of health and sanitary arrangements for workers.

31.0 WORKMEN'S COMPENSATION ACT

The Contractor shall at all times indemnify EPI and Owner against all claims for compensation under the provision of Workmen's Compensation Act,1923 or any other law in force, for any workmen employed by the Contractor or his sub-Contractor in carrying out the contract and against all costs and expenses incurred by EPI therewith.

32.0 MINIMUM WAGES ACT

The Contractor shall comply with all the provisions of the Minimum Wages Act, 1948, Contract Labour Act (R&A) 1970, and rules framed thereunder and other labour laws/local laws affecting contract labour that may be brought into force from time to time.

33.0 LABOUR RECORDS

The Contractor shall submit by the 4th & 19th of every month to the Engineer-In-Charge of EPI a true statement, showing in respect of the second half of the preceding month and the first half of the current month, respectively, of the following data :-

a) The number of the labour employed by him (category-wise).

b) Their working hours.

c) The wages paid to them.

d) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused.

e) The number of female workers who have been allowed Maternity Benefits under the Maternity Benefit Act,1962 and the amount paid to them.

f) Any other information required by Engineer-In-Charge.

34.0 RELEASE OF RETENTION MONEY AFTER LABOUR CLEARANCE

Retention Money of the work shall not be refunded till the Contractor produces a clearance certificate from the concerned Labour Officer. As soon as the work is virtually complete, the Contractor shall apply for the clearance certificate to the concerned Labour Officer under intimation to the Engineer-In-Charge. The Engineer-In-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the Contractor in respect of the work. If no complaint is pending, on record till three months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Retention Money will be released if otherwise due.

35.0 SECURED ADVANCE AGAINST NON-PERISHABLE MATERIALS

Interest free secured advance up-to a maximum of 75 % (seventy five percent) of the Market Value of the materials or the cost of materials as derived from the tendered item rate of the Contractor, whichever is less, required for incorporation in the permanent works and brought to Site and duly certified by EPI Site Engineer shall be paid to the Contractor for all non-perishable items as per CPWD/ MORTH (as the case may be) norms. The advance will be paid only on submission of Indemnity Bond in the prescribed pro-forma. The advance shall be recovered in full from next Running Account bill and fresh advance paid for the balance quantities of materials. The Contractor shall construct suitable godown at the Site of work for safe storage of the materials against any possible damages due to sun, rain, dampness, fire, theft etc. at his own cost. He shall also employ necessary watch & ward establishment for the purpose at his costs and risks Such secured advance shall be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-In-Charge provided the Contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-In-Charge shall be final and binding on the Contractor in this matter. No secured advance shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel etc.

36.0 MEASUREMENTS OF WORKS

36.1 Unless otherwise mentioned in the Bill of Quantities the measurements of works shall be done as per CPWD/MORTH specifications (as specified in Technical Specification of the Tender) and if the same is not given in the CPWD/MORTH Specifications, the same shall be measured as per latest relevant BIS codes in force. The quantity of steel reinforcement and the structural steel sections incorporated in the work shall be measured & paid on the basis of standard coefficients of sections as per BIS Codes of practice.

36.2 The Engineer-In-Charge shall except as otherwise stated ascertain and determine by measurement the value of work done in accordance with the contract.

36.3 All items having financial value shall be entered in Measurement Book, level book, etc. prescribed by EPI so that a complete record is obtained of all work performed under the contract. Items of non-financial value (which are not payable) may also be entered in Measurement Book at the sole discretion of the Engineer-In-Charge.

36.4 Measurements shall be taken jointly by the Engineer-In-Charge or his authorized representative and by the Contractor or his authorized representative.

36.5 Before taking measurements of any work the Engineer-In-Charge or the authorized person deputed by him for the purpose shall give a reasonable notice to the Contractor. If the Contractor fails to attend or send an authorized representative for measurement after such a notice or fails to countersign or to record the objection within a week from the date of measurement, then in any such event measurement taken by the Engineer-In-Charge or by the person deputed by him shall be taken to be correct measurements of the work.

36.6 The Contractor shall, without extra charge provide assistance with every appliance, labour and other things necessary for measurement.

Measurements shall be signed and dated by both parties each day on the Site on completion of measurement.

37.0 PAYMENTS

37.1 The bill shall be submitted by Contractor each month on or before the date fixed by the ENGINEER-IN-CHARGE for all works executed in previous months. The Contractor shall prepare computerized bills using the program as approved by Engineer-In-Charge as per prescribed format/ pro-forma. The Contractor shall submit five numbers of hard copies and one soft copy of floppy/ CD for all bills. Subject to clause 37.3 herein below, the payment due to the Contractor shall be made within fifteen days of getting the measurements verified from the Engineer-In-Charge or his subordinate/ representative and certification of bill by the Engineer-In-Charge.

37.2 All running payments shall be regarded as ‘on account’ payments against the final payment only and not as payments for work actually done and completed and / or accepted by EPI and shall not preclude the recovery for bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the Contract, or any part thereof, in this respect, or the accruing of any claim, nor shall it conclude, determine or affect in any way the powers of EPI under these conditions or any of them as to the final settlement and adjustments of the accounts or otherwise, or in any other way vary/ affect the contract. The final bill shall be submitted by the Contractor within three months of

the completion of work, otherwise EPI's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on Contractor. Each Running Bill should be accompanied by two sets of at-least 20 (twenty) photographs as per direction of Engineer-In-Charge taken from various points depicting status of work as on Report/ Bill date along with Monthly Progress Report for the concerned month in the pro-forma to be given/ approved by Engineer-In-Charge. Intermittent progress photographs as and when required shall also be provided by the Contractor at his own cost as per direction of Engineer-In-Charge. No payment of running account bill shall be released unless it is accompanied by progress photographs and Monthly Progress Report as above.

37.3 It is clearly agreed and understood by the Contractor that notwithstanding anything to the contrary that may be stated in the agreement between EPI and the Contractor, the Contractor shall become entitled to payment only after EPI has received the corresponding payment(s) from the Client/ Owner for the work done by the Contractor. Any delay in the release of payment by the Client/ Owner to EPI leading to delay in the release of the corresponding payment by EPI to the Contractor shall not entitle the Contractor to any compensation/ interest from EPI.

37.4 All payments shall be released by EPI by Account Payee Cheque from any of its offices in India directly at the address notified by the Contractor (Postage charges shall be charged to the Contractor's account). In case of Payments is made by Demand Draft at the request of the Contractor, Bank Commission charges shall be debited to the account of Contractor.

38.0 WORK ON SUNDAYS, HOLIDAYS AND DURING NIGHT

For carrying out work on Sunday and Holidays or during night, the Contractor will approach the Engineer-In-Charge or his representative at least two days in advance and obtain his permission. The Engineer-In-Charge at his discretion can refuse such permission. The Contractor shall have no claim on this account whatsoever. If work demand, the Contractor shall make arrangements to carry out the work on Sundays, Holidays and in two, three shifts with the approval of Engineer-in- Charge at no extra cost to EPI.

39.0 NO IDLE CHARGES TOWARDS LABOUR OR PLANT & MACHINERY ETC.

No idle charges or compensation shall be paid for idling of the Contractor's labour, staff or Plant & Machinery etc. on any ground or due to any reason whatsoever. EPI will not entertain any claim in this respect.

40.0 WORK TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS, ETC.

The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The Contractor shall also conform exactly, fully and faithfully to the Design, Drawings and Instructions

in writing in respect of the work assigned by the Engineer-In-Charge and the Contractor shall be furnished free of charge one copy of the Contract Documents together with Specifications, Designs, Drawings.

The Contractor shall comply with the provisions of the contract and execute the works with care and diligence and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

41.0 DIRECTION FOR WORKS

41.1 All works to be executed under the contract shall be executed under the direction and subject to approval in all respect of the Engineer-In-Charge of EPI who shall be entitled to direct at what point or points and in what manner works are to be commenced and executed.

41.2 The Engineer-In-Charge and his representative shall communicate or confirm their instructions to the Contractor in respect of the execution of work during their Site inspection in a 'Works Site Order Book' maintained at the site office of Engineer-In-Charge. The Contractor or his authorized representative shall confirm receipt of such instructions by signing against the relevant orders in the book. The Contractor shall be bound to sign the site order book as and when required by Engineer-In-Charge and carry out compliance of instructions promptly to the satisfaction of Engineer-In-Charge.

42.0 ORDER OF PRECEDENCE OF DOCUMENTS

42.1 In case of difference, contradiction, discrepancy, dispute with regard to Conditions of Contract, Specifications, Drawings, Bill of Quantities and Rates quoted by the Contractor and other documents forming part of the contract, the following shall prevail in order of precedence.

i) Contract Agreement
ii) Fax, Telegram or Letter of Intent, detailed letter of Work Order along with statement of agreed variations and its enclosures.
iii) Description in Bill of Quantity / Schedule of Quantities
iv) Additional Conditions of Contract.
v) Technical specifications (General / Special Technical Specification) as given in the Tender Documents.
vi) General Conditions of Contract.
vii) Drawings
viii) CPWD/ MORTH specifications (as specified in Technical Specification of the Tender) update with correction slips issued up to last date of receipt of Tenders.

ix) Relevant B.I.S. Codes.

42.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-In-Charge shall be the deciding authority with regard to the intention of the document which shall be final and binding on the Contractor.

42.3 Any error in description, quantity or rate in the Schedule of Quantities/items or Bill of Quantities or any omission there from shall not vitiate the contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to the Drawings and Specifications or from any of his obligations under the contract.

43.0 TIME SCHEDULE & PROGRESS

43.1 Time allowed for carrying out all the works as entered in the Tender shall be as mentioned in the "Memorandum" to the "Form of Tender" which shall be reckoned from the 10th day from the date on which the letter/ telegram of Intent is issued to the Contractor. Time shall be the essence of the contract and Contractor shall ensure the completion of the entire work within the stipulated time of completion.

43.2 The Contractor shall also furnish within 10 days from the date of letter/ telegram of Intent, a CPM network/ PERT chart/ Bar Chart for completion of work within stipulated time. This will be duly got approved from EPI. This approved Network/ PERT Chart shall form a part of the agreement. Achievement of milestones as well as total completion has to be within the time period allowed.

43.3 Contractor shall mobilize and employ sufficient resources for completion of all the works as indicated in the agreed BAR CHART/Network. No additional payment will be made to the Contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by the Engineer-In-Charge.

43.4 During the currency of the work the Contractor is expected to adhere to the time schedule on miles stone and total completion and this adherence will be a part of Contractor's performance under the contract. During the execution of the work Contractor is expected to participate in the review and updating of the Network/ BAR CHART undertaken by EPI. These reviews may be undertaken at the discretion of EPI either as a periodical appraisal measure or when the quantum of work order on the Contractor is substantially changed through deviation orders or amendments. The review shall be held at Site or any of the offices of EPI/ Owner or Consultant of EPI/ Owner at the sole discretion of EPI.

43.5 If at any time, it appears to the Engineer-In-Charge that the actual progress of work does not conform to the approved programme referred above, the Contractor shall produce a revised programme showing the modifications to the approved programme by additional inputs to ensure completion of the work within the stipulated time. The Contractor will adhere to the revised schedule thereafter. The approval to the revised schedule resulting in a completion date beyond the

stipulated date of completion shall not automatically amount to a grant of extension of time to the Contractor.

43.6 Contractor shall submit fortnightly/ Monthly (as directed by Engineer-In-Charge) progress reports (5 copies) on a computer based program (program and software to be approved by Engineer-In-Charge) highlighting status of various activities and physical completion of work.

43.7 The Contractor shall send completion report along with as built drawings and maintenance schedule to the office of Engineer-In-Charge, of EPI in writing within a period of 30 days of completion of work.

44.0 WATER AND ELECTRICITY

The Contractor shall make his own arrangement for Water & Electrical power for construction and other purposes at his own cost and pay requisite electricity and water charges. The Contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

45.0 MATERIALS TO BE PROVIDED BY THE CONTRACTOR

The Contractor shall, at his own expense, provide all materials, required including Cement & Steel for the works.

The Contractor shall at his own expense and without delay, supply to the Engineer-in- Charge samples of materials to be used on the work and shall get the same approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The Contractor shall, if requested by the Engineer-in- Charge furnish proof, to the satisfaction of the Engineer-In-Charge that the materials so comply.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-In-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the Contractor shall afford every facility and every assistance and cost in obtaining the right and visit to such access.

The Engineer-In-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-In-Charge shall be at liberty to employ at the expense of the Contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-In-Charge shall also have full power to require other proper materials to be substituted thereof and in case of default, the Engineer-In-Charge may cause the same to the supplies and all

costs which may require such removal and substitution shall be borne by the Contractor.

45.1 CEMENT AND CEMENT GODOWN

Cement shall be procured by Contractor of 43 Grade conforming to BIS : 8112 Specification latest edition or higher Grade as directed by the Engineer-In-Charge. The cement shall be procured directly from the reputed manufacturers/ stockist, which will have to be got approved from EPI in advance. Relevant vouchers and test certificates will be produced as and when required. The cement shall be stored by the Contractor in such suitable covered and lockable stores, well protected from climate and atmospheric effect. The cement godown shall be constructed by the Contractor as per CPWD specifications at his own cost. The cement will remain under double lock, one from EPI and other from Contractor. The cement in bags shall be stored in godowns in easy countable position. Cement bags shall be used on first in first out basis. Cement stored for beyond 90 days will be required to be tested at Contractors cost, before use in works.

45.2 STEEL & STEEL STOCKYARD

Steel conforming to BIS specifications (latest edition) shall be procured by the Contractor directly from reputed manufacturers/producers as approved by EPI. The manufacturer has to give a certificate that the material supplied is not a re-rolled product. Relevant vouchers & test certificates will be produced by the Contractor. Re-rolled sections will not be allowed.

Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The Contractor shall take proper care to prevent direct contact between the steel and the ground/ water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per directions of the Engineer-In-Charge. If required, the reinforcement steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made.

Test certificates for each consignment of steel shall be furnished and tests to be got carried out by the Contractor at his own cost from the authorized laboratory as per the directions of Engineer-In-Charge, before incorporating the materials in the work.

46.0 SCHEDULE OF QUANTITIES / BILL OF QUANTITIES

46.1 The quantities shown against the various items of work are only approximate quantities, which may vary as per the actual requirement at Site.

46.2 All items of work in the Bill of Quantities/ schedule of quantities shall be carried out as per the CPWD/ MORTH (as the case may be) specifications, drawings and instructions of the ENGINEER-IN-CHARGE of EPI and the rates shall include for supply of required materials including proper storage, consumables, skilled & unskilled labour, supervision, tools, tackles, plant & machinery complete

as called for in the detailed specifications and conditions of the contract. No item, which is not covered in the Bill of Quantities, shall be executed by the Contractor without the approval of EPI. In case any Extra/Substituted item is carried out without specific-approval, the same will not be paid.

47.0 ANTI-TERMITE TREATMENT & WATER PROOF TREATMENT

47.1 Pre-construction treatment shall be carried out in co-ordination with the building work and shall be executed in such a manner that the civil works are not hampered or delayed by the anti-termite treatment. The treatment shall be carried out as detailed in BIS: 6313 (Part-II) latest revision. The waterproof treatment shall be of type and specifications as given in the schedule of quantities.

47.2 The treatment against water-proofing of basement, roofs, water retaining areas and termite infestation shall be and remain fully effective for a period of not less than 10(Ten) years to be reckoned from the date of expiry of the Defect Liability period, prescribed in the contract. At any time during the said guarantee period if EPI finds any defects in the said treatment or any evidence of re-infestation, dampness, leakage in any part of buildings or structure and notifies the Contractor of the same, the Contractor shall be liable to rectify the defect or give re-treatment at his own cost and shall commence the work or such rectification or re-treatment within seven days from the date of issue of such letter to him. If the Contractor fails to commence such work within the stipulated period, EPI may get the same done by another agency at the Contractor's cost and risk and the decision of the Engineer-In-Charge of EPI for the cost payable by the Contractor shall be final and binding upon him.

47.3 Re-treatment if required shall be attended to and carried out by the Contractor within seven days of the notice from Engineer-In-Charge of EPI.

47.4 EPI reserves the right to get the quality of treatment checked in accordance with recognized test methods and in case it is found that the chemicals with the required concentration and rate of application have not been applied, or the water proof treatment is not done as per specifications, the Contractor will be required to do the re-treatment in accordance with the required concentration & specifications at no extra cost failing which no payment for such work will be made. The extent of work thus rejected shall be determined by EPI.

47.5 Water proofing and anti-termite treatment shall be got done through approved / specialized agencies only with prior approval of Engineer-In-Charge.

47.6 The Contractor shall make such arrangement as may be necessary to safeguard the workers and residents of the building against any poisonous effect of the chemicals used during the execution of the work.

47.7 During the execution of work, if any damage shall occur to the treatment already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of Engineer-In-Charge by the Contractor at his cost.

47.8 The Contractor shall make his own arrangement for all equipments required for the execution of the job.

47.9 The Contractor shall execute Guarantee Bond in the prescribed form as appended for guaranteeing the anti-termite treatment and waterproof treatment.

48.0 INDIAN STANDARDS

Wherever any reference is made to any IS in any particular specifications, Drawings or Bill of Quantities, it means the Indian Standards editions with the amendments current at the last date of receipt of Tender Documents.

49.0 CENTERING & SHUTTERING

Marine plywood only or steel plates of minimum thickness as approved by Engineer-In-Charge shall be used for formwork. The shuttering plates shall be cleaned and oiled after every repetition and shall be used only after obtaining approval of EPI's Engineers at Site. The number of repetitions allowed for plywood and steel shuttering shall be at the discretion of Engineer-In-Charge of EPI depending upon the condition of shuttering surface after each use and the decision of ENGINEER-IN-CHARGE in this regard shall be final and binding on the Contractor. No claim whatsoever on this account shall be admissible.

50.0 CONTROLLED MATERIALS

50.1 The following Controlled materials shall be brought to Site after the approval of EPI.

a) Water proofing compound.

b) Cement

c) Steel

d) Primer/ Paints/ Varnish etc.

e) Bitumen

f) Chemical for anti termite treatment

g) Any other materials as per discretion of EPI.

50.2 The quantity of Controlled materials shall be measured and recorded in the Measurement books and signed by the Contractor and the Engineer-In-Charge as a check to ensure that the required quantities as required for execution of works as per specifications have been brought to Site for incorporation in the work.

50.3 Controlled materials brought at Site shall be stored as directed by EPI and those already recorded in Measurement book, shall be suitably marked for identification.

50.4 The Contractor shall ensure that the Controlled materials are brought to Site in original sealed containers or packing bearing manufacturer's markings and

brands (except where the quantity required is a fraction of the smallest packing). Materials not complying with this requirement shall be rejected. The empty containers of such Controlled materials shall not be destroyed/ disposed-off without the written permission of EPI.

50.5 The Contractor shall produce receipted vouchers showing quantities of the materials to satisfy Engineer-In-Charge that the materials comply with the specifications. These vouchers shall be endorsed, dated and initialed by Engineer-In-Charge giving the contract number and name of work and a certified copy of each such voucher signed both by EPI and the Contractor shall be kept on record.

50.6 When the cost of each category of materials is less than Rs.5000/- production of vouchers may not be insisted upon if EPI is otherwise satisfied with the quality and quantity of materials.

51.0 RECORDS OF CONSUMPTION OF CEMENT & STEEL

51.1 For the purpose of keeping a record of cement and steel received at Site and consumption in works, the Contractor shall maintain a properly bound register in the form approved by EPI, showing columns like quantity received and used in work and balance in hand etc. This register shall be signed daily by the Contractor's representative and EPI's representative.

51.2 The register of cement & steel shall be kept at Site in the safe custody of EPI's Engineer during progress of the work. This provision will not, however, absolve the Contractor from the quality of the final product.

51.3 In case cement or steel quantity consumed is lesser as compared to the theoretical requirement of the same as per CPWD/MORTH (as the case may be) specifications/ norms, the work will be devalued and/ or a penal rate (i.e. double the rate at which cement/ steel purchased last) recovery for lesser consumption of cement/ steel shall be made in the item rates of the work done subject to the condition that the tests results fall within the acceptable criteria as per CPWD/MORTH (as the case may be) specifications otherwise the work shall have to be dismantled and redone by the Contractor at no extra cost.

In case of cement, if actual consumption is less than 98% of the theoretical consumption, a recovery shall be effected from the Contractor's dues at the penal rate for the actual quantity that is lower than 98% of theoretical consumption.

52.0 MATERIALS AND SAMPLES

52.1 The materials/ products used on the works shall be one of the approved make/ brands out of list of manufacturers/ brands/ makes given in the Tender Documents. The Contractor shall submit samples/ specimens out of approved makes of materials/ products to the Engineer-In-Charge for prior approval. In

exceptional circumstances Engineer-In-Charge may allow alternate equivalent makes/ brands of products/ materials at his sole discretion. The final choice of brand/ make shall remain with the Engineer-In-Charge, whose decision in this matter shall be final and binding and nothing extra on this account shall be payable to the Contractor.

In case single brand/ make is mentioned, other equivalent makes/ brands may be considered by the Engineer-In-Charge with prior approval. In case of variance in CPWD/ IS/BIS Specifications from approved products/ makes specification, the specification of approved product/ make shall prevail for which nothing shall be paid extra to the Contractor.

In case no make or brand of any materials, articles, fittings and accessories etc. is specified, the same shall comply with the relevant Indian Standard Specifications and shall bear the ISI/BIS mark. The Engineer of EPI and the Owner shall have the discretion to check quality of materials and equipments to be incorporated in the work, at source of supply or site of work and even after incorporation in the work. They shall also have the discretion to check the workmanship of various items of work to be executed in this work. The Contractor shall provide the necessary facilities and assistance for this purpose.

52.2 The above provisions shall not absolve the Contractor from the quality of final product and in getting the material and workmanship quality checked and approved from the Engineer-In-Charge of EPI.

52.3 The Contractor shall well in advance, produce samples of all materials, articles, fittings, accessories etc. that he proposes to use and get them approved in writing by EPI. The materials articles etc. as approved shall be labelled as such and shall be signed by EPI and the Contractor’s representative.

52.4 The approved samples shall be kept in the custody of the Engineer- in-Charge of EPI till completion of the work. Thereafter the samples except those destroyed during testing shall be returned to the Contractor. No payment will be made to the Contractor for the samples or samples destroyed in testing.

52.5 The brands of all materials, articles fittings etc. approved together with the names of the manufacturers and firms from which supplies have been arranged shall be recorded in the Site Order Book.

52.6 The Contractor shall set up and maintain at his cost, a field testing laboratory for all day-to-day tests at his own cost to the satisfaction of the Engineer-In-Charge. This field testing laboratory shall be provided with equipment and facilities to carry out all mandatory field tests as per CPWD/MORTH (as the case may be) specifications. The laboratory building shall be constructed and installed with the appropriate facilities; Temperature and humidity controls shall be available wherever necessary during testing of samples.

All equipments shall be provided by the Contractor so as to be compatible with the testing requirements specified. The Contractor shall maintain all the equipments in good working condition for the duration of the contract.

The Contractor shall provide approved qualified personnel to run the laboratory for the duration of the Contract. The number of staff and equipment available must at all times be sufficient to keep pace with the sampling and testing programme as required by the Engineer-In-Charge.

The Contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning, including all transport needed to move equipment and samples to and from sampling points on the Site, etc.

The Contractor shall re-calibrate all measuring devices whenever so required by the Engineer-In-Charge and shall submit the results of such measurements without delay.

All field tests shall be carried out in the presence of EPI's representative. All costs towards samples, materials, collection, transport, manpower, testing, including concrete mix-design etc. shall be borne by the Contractor and are deemed to be included in the rates quoted by him in the Bill of Quantities.

53.0 TESTS AND INSPECTION

53.1 The Contractor shall carry out the various mandatory tests as per specifications and the technical documents that will be furnished to him during the performance of the work. All the tests on materials, as recommended by CPWD, MORTH (as the case may be) and relevant Indian Standard Codes or other standard specifications (including all amendments current at the last date of submission of Tender Documents) shall be got carried out by the Contractor at the field testing laboratory or any other recognized institution/ laboratory, at the direction of EPI. All testing charges, expenses etc. shall be borne by the Contractor. All the tests, either on the field or outside laboratories concerning the execution of the work and supply of materials shall be got carried out by the Contractor or EPI at the cost of the Contractor.

53.2 WORKS TO BE OPEN TO INSPECTION

All works executed or under the course of execution in pursuance of this contract shall at all times be open to inspection and supervision of EPI. The work during its progress or after its completion may also be inspected, by Chief Technical Examiner of Government of India (CTE) and/ or an inspecting authority of State Government of State in which work is executed and/or by third party checks by Owner/ Clients. The compliance of observations/ improvements as suggested by the inspecting officers of EPI/CTE/ State authorities/ Owners shall be obligatory on the part of the Contractor at the cost of Contractor.

54.0 BORROW AREAS

The Contractor shall make his own arrangements for borrow pits and borrow disposal areas including their approaches and space for movement of men, machinery, other equipments as required for carrying out the works. The Contractor shall be responsible for taking all safety measures, getting approval,

making payment of royalties, charges etc. and nothing extra shall be paid to the Contractor on this account and unit rates quoted by the Contractor for various items of Bill of Quantities shall be deemed to include the same.

55.0 BITUMEN WORK

The Contractor shall be responsible for arranging Bitumen/Tar of required grade from source to be approved by the Engineer-In-Charge. No Bitumen work shall be carried out on wet surface or in rainy conditions.

56.0 CARE OF WORKS

From the commencement to the completion of works and handing over, the Contractor shall take full responsibility for care of all the works and in case of any damage/loss to the works or to any part thereof or to any temporary works due to lack of precautions or due to negligence on part of Contractor, the same shall be made good by the Contractor at his own cost.

57.0 WORK IN MONSOON AND DEWATERING

The execution of the work may entail working in the monsoon also. The Contractor must maintain labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No special/ extra rate will be considered for such work in monsoon. The Contractor's rate shall be considered inclusive of cost of dewatering required, if any and no extra rate shall be payable on this account.

58.0 NO COMPENSATION FOR FORECLOSURE/CANCELLATION/ REDUCTION OF WORKS

If at any time after the commencement of the work EPI shall for any reason whatsoever is required to abandon the work or does not require the whole work thereof as specified in the Tender to be carried out, the Engineer-In-Charge shall give notice in writing of the fact to the Contractor, who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out or on foreclosure, neither shall he have any claim for compensation by reason of any alterations having been made in the original Specifications, Drawings, Designs and Instructions which shall involve any curtailment of the work as originally contemplated.

Provided that the Contractor shall be paid the charges on the cartage only of materials actually and bonafide brought to the Site of the work by the Contractor and rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof and then taken back by the Contractor, provided however, that the Engineer-In-Charge shall have in all such cases the option of taking over all or any such materials at their purchase price or at local current rates whichever may be less. In the case of such stores having been issued by EPI

and returned by the Contractor to EPI, credit will be given to him by the Engineer-In-Charge at rates not exceeding those at which they were originally issued to him after taking into consideration any deduction for claims on account of any deterioration or damage while in the custody of the Contractor and in this respect the decision of the Engineer-In-Charge shall be final.

59.0 RESTRICTION ON SUBLETTING

59.1 The Contractor shall not sublet or assign the whole or part of the works except where otherwise provided, by the contract and even then only with the prior written consent of EPI and such consent if given shall not relieve the Contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults or neglects of any sub-Contractor, his agents, servants or workmen as full as if they were the acts, defaults or neglects of the Contractor, his agent, servants or workmen provided always that the provision of labour on piece work basis shall not be deemed to be a subletting under this clause.

59.2 The Contractor may entrust specialist items of works to the agencies specialized in the specific trade. The Contractor shall give the names and details of such firm whom he is going to employ for approval of EPI. These details shall include the expertise, financial status, technical manpower, equipment, resources and list of works executed and on hand of the specialist agency. Specialist agency shall be engaged only after obtaining written approval of the Engineer-In-Charge.

60.0 PROHIBITION OF UNAUTHORISED CONSTRUCTION & OCCUPATION

No unauthorized buildings, structures should be put up by the Contractor anywhere on the project Site, neither any building built by him shall be un-authorizedly occupied by him or his staff.

61.0 CO-ORDINATION WITH OTHER AGENCIES

Work shall be carried out in such a manner that the work of other Agencies operating at the Site is not hampered due to any action of the Contractor. Proper Co-ordination with other Agencies will be Contractor's responsibility. In case of any dispute the decision of EPI shall be final and binding on the Contractor. No claim whatsoever shall be admissible on this account.

62.0 SETTING OUT OF THE WORKS

62.1 The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the works. If at any time during the progress of works, shall any error appear or arise in the position, levels, dimensions or alignment of any part of the works, the Contractor shall at his own expenses rectify such error to the satisfaction of Engineer-in- charge. The checking of any setting out or of any line or level by the engineers of EPI shall not in any way relieve the Contractor of his responsibility for the correctness.

62.2 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural, Plumbing and other services Drawings.

63.0 NOTICE BEFORE COVERING UP THE WORK

The Contractor shall give not less than seven days notice before covering up or otherwise placing beyond the reach of measurement any work, to the Engineer-In-Charge in order that the same may be inspected and measured. If any work is covered up or placed beyond the reach of Inspection/ measurement without such notice to the Engineer-In-Charge or his consent being obtained, the same shall be uncovered at the Contractors expenses and he shall have to make it good at his own expenses.

64.0 SITE CLEARANCE

64.1 The Contractor shall ensure that the working Site is kept clean and free of obstructions for easy access to job Site and also from safety point of view. Before handing over the work to EPI the Contractor shall remove all temporary structures like the site offices, cement godown, stores, labour hutments etc., scaffolding rubbish, left over materials tools and plants, equipments etc., clean and grade the Site to the entire satisfaction of the Engineer-In-Charge. If this is not done the same will be got done by EPI at his risk and cost.

64.2 The Contractor shall clean all floors, remove cement/ lime/ paint drops and deposits, clean joinery, glass panes etc., touching all painter's works and carry out all other necessary items of works to make the premises clean and tidy before handing over the building, and the rates quoted by the Contractor shall be deemed to have included the same.

65.0 VALUABLE ARTICLES FOUND AT SITE

All gold, silver and other minerals of any description and all precious stones, coins, treasure, relics, antiques and all other similar things which shall be found in, under or upon the Site, shall be the property of the Owner/ Government and the Contractor shall duly preserve the same to the satisfaction of Engineer-In-Charge and shall from time to time deliver the same to such person or persons indicated by EPI.

66.0 MATERIALS OBTAINED FROM DISMANTLEMENT TO BE OWNER'S PROPERTY

All materials like stone, boulders and other materials obtained in the work of dismantling, excavation etc. will be considered Owner/ government property and may be issued to the Contractor by the Owner/ EPI, if required for use in this work at rates approved by EPI or the Contractor may be asked to dispose off these items at his cost.

67.0 SET-OFF OF CONTRACTOR'S LIABILITIES

EPI shall have the right to deduct or set off the expenses incurred or likely to be incurred by it in rectifying the defects and/or any claim under this agreement

against the Contractor from any or against any amount payable to the Contractor under this agreement including Retention Money and proceeds of Security Deposit cum Performance Guarantee and from any other contract being executed by the Contractor for EPI.

68.0 MATERIALS PROCURED WITH THE ASSISTANCE OF EPI

If any material for the execution of this contract is procured with the assistance of EPI either by issue from its stores or purchase made under orders or permits or licences obtained by EPI, the Contractor shall hold and use the said materials economically and solely for the purpose of this contract and shall not dispose them without the written permission of Engineer-In-Charge. The Contractor, if required by EPI, shall return all such surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination on whatsoever reason, on being paid or credited such price as EPI shall determine having due regard to the conditions of materials.

69.0 ALTERATION IN SPECIFICATION, DESIGN & DRAWING

69.1 The Engineer-In-Charge shall have power to make any alterations in, omissions from, additions to or substitutions for, the original Specifications, Drawings, Designs and Instructions that may appear to him to be necessary during the progress of the work, and the Contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-In-Charge and such alterations, omissions, additions, or substitutions shall not invalidate the contract and any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as part of the work shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main work.

The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work price bears to the original contract work price, and the certificate of the Engineer-In-Charge shall be conclusive as to such proportion. Over and above this, a further period to the extent of 25 percent of such extension shall be allowed to the Contractor.

The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order :

i) If the rates for the additional, altered or substituted work are specified in the contract for the work, the Contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract for the work.

ii) If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a nearest similar item of work as are specified in the contract for the work. In case of composite tenders where two or more

schedule of quantities/ Bill of Quantities form part of the contract, the rates shall be derived from the nearest similar item in the schedule of quantities/Bill of Quantities of the particular part of work in which the deviation is involved failing that from the lowest of the nearest similar item in other schedule of quantity. The opinion of the Engineer-In-Charge as to whether or not the rate can be reasonably so derived from the item in this contract will be final and binding on the Contractor.

iii) If the altered, additional or substituted work includes any work for which no rate is specified in the contract for the work and which cannot be derived in the manner specified in sub para (i) and (ii) above from the similar class of work in the contract then such work shall be carried out at the rates entered in the Schedule of Rates (as mentioned in "Memorandum" to the "Form of Tender" for Civil/ Sanitary Works) minus/plus the percentage which the tendered amount of scheduled items bears with the estimated amount of schedule items based on the Schedule of Rates (as mentioned in "Memorandum" to the "Form of Tender" for Civil/ Sanitary Works). The scheduled items mean the items appearing in the Schedule of Rates (as mentioned in "Memorandum" to the "Form of Tender" for Civil/ Sanitary Works), which shall be applicable in this clause. This clause will apply mutatis mutandis to electrical work except that Electrical Schedule of Rates as mentioned in "Memorandum" to the "Form of Tender" will be considered in place of Civil/ Sanitary works Schedule of rates as mentioned in "Memorandum" to the "Form of Tender".

iv) If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub-clauses (i) to (iii) above, then the Contractor shall, within 7 days of the date of receipt of order to carry out the work, inform the Engineer-In-Charge the rates which he intends to charge for such class of work, supported by analysis of the rate or rates claimed, and the Engineer-In-Charge shall determine the rate or rates on the basis of prevailing market rates of the material, Labour, T&P etc. plus 10% (Ten percent) to cover the Contractors supervision, overheads and profit and pay the Contractor accordingly. The opinion of the Engineer-In-Charge as to the current market rates of materials and quantum of labour involved per unit of measurements will be final and binding on the Contractor.

However, the Engineer-In-Charge, by notice in writing, will be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner, as he may consider advisable. But under no circumstances, the Contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.

v) Except in case of items relating to foundations, provisions contained in sub clauses (i) to (iv) above shall not apply to contract, altered or substituted items as individually exceed the 'deviation limit' of plus/minus 25% (Twenty Five Percent) subject to the following:-

(a) Deviation limit shall apply to individual items.

(b) The value of additions of items, of any individual trade not already included in the contract, shall not exceed 20% of the Tendered value of work, subject to overall deviation limit as given above.

Provided further that in case where the original item is substituted, the Substituted Item shall be deemed to have replaced the original item in the contract itself to that extent and above provisions pertaining to the deviations shall apply with respect to such Substituted Item and not the original item.

NOTE: Individual trade means the trade section to which Bill of Quantities annexed to the agreement has been divided or in the absence of any such division the individual section of the MORTH/C.P.W.D. (as the case may be) Scheduled of rates specified above, such as excavation and earthwork, Concrete, wood work and joinery, etc.

The rate of any such work except the items relating to foundations which is in excess of the deviation limit and deviation in quantities of AHR items on plus side as contained in Clause 9.2(i) shall be determined in accordance with the provisions contained in Clause 69.2.

69.2 In the case of contract items, substituted items, Contract cum substituted items or additional items which exceed the limits laid down in sub para (v) of condition 69.1 above (except the items relating to foundation work, which the Contractor is required to do under Clause 69.1 above and deviation in quantities of AHR items on plus side as contained in clause 9.2 (i)), the Contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities or those derived in accordance with the provisions of sub para (i) to (iii) of conditions 69.1 by more than five percent, the Engineer-In-Charge shall within three months of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the Contractor, determine the rates on the basis of the market rates and if the rates so determined exceed the rates specified in the schedule of quantities or those derived in accordance with the provisions of sub paras (i) to (iii) of condition 69.1 by more than five percent, the contract shall be paid in accordance with the rates determined. In the event of the Contractor failing to claim revision of rates within the stipulated period, or if the rates determined by the Engineer-In-Charge within the period of three months of receipt of the claims supported by analysis are within five percent of the rates specified in the schedule of quantities or of those determined in accordance with the provisions of sub-para (i) to (iii) of condition 69.1, the Engineer-In-Charge shall make payment at the rates as specified in the schedule of quantities or those already determined under sub para (i) to (iii) of condition 69.1 for the quantities in excess of the limits laid down in sub para (v) of condition 69.1.

69.3 The provisions of the proceeding paragraph shall apply to the decrease in the rates of items for the work in excess of the limits laid down in sub para (v) of

condition 69.1 provided that such decrease is more than five percent of rates specified in the schedule of quantities or those derived in accordance with the provisions of sub para (i) to (iii) of condition 69.1 and the Engineer-In-Charge may after giving notice to the Contractor within two months of receipt of order by the Contractor or occurrence of the excess and after taking into consideration any reply received from him within fifteen days of receipt of the notice revise the rates for the work in question within two months of expiry of the said period of fifteen days having regard to the market rates.

69.4 The Contractor shall send to the Engineer-In-Charge once every three months an up to date account giving complete details of all claims for additional payments to which the Contractor may consider himself entitled and of all additional work ordered by the Engineer-In-Charge which he has executed during the preceding quarter failing which the Contractor shall be deemed to have waived his right.

69.5 For the purpose of operation of clause 69.1 (v) the following works shall be treated as works relating to foundation:-

i) For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.C. but including base concrete below the floors.

ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.

iii) For retaining walls where floor level is not determinate 1.2 meters above the average ground level or bed level.

iv) For Roads all items of excavation and filling including treatment of sub base and soiling work.

v) For water supply lines, sewer lines, under-ground storm water drains and similar works. All items of work below ground level except items of pipe work, masonry work.

vi) For open storm water drains, all items of work except lining of drains.

70.0 ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK

If it shall appear to the Engineer-In-Charge or his authorized subordinate in charge of the work or to the Chief Technical Examiner or to any other inspecting agency of Government/ State Government/ Owner where the work is being executed, that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the Contractor shall on demand in writing which shall be made within six months of the completion of the work from the ENGINEER-IN-CHARGE specifying the work, materials or articles complained of notwithstanding that the same may have been passed, Certified and paid for forthwith rectify, or remove and

reconstruct the work so specified in whole or in part as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-In-Charge in his demand aforesaid, then the Contractor shall be liable to pay compensation at the rate of one percent of the estimated amount put to tender for every day not exceeding ten days, while his failure to do so shall continue and in the case of any such failure, the Engineer-In-Charge may rectify or remove and re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and expense in all respects of the Contractor.

71.0 POSSESSION PRIOR TO COMPLETION

71.1 EPI shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be any acceptance of any work not completed in accordance with the contract agreement. If such prior possession or use by EPI delays the progress of work an equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly. The decision of EPI in this case shall be final binding and conclusive.

71.2 When the whole of the works or the items or the groups of items of work for which separate periods of completion have been specified have been completed the Contractor will give a notice to that effect to the Engineer in writing. The Engineer shall within 15 days of the date of receipt of such notice inspect the works and either the Engineer-In-Charge issues to the Contractor a completion certificate stating the date on which in his opinion the works were completed in accordance with the contract or gives instructions in writing to the Contractor specifying the balance items of work which are required to be done by the Contractor before completion certificate could be issued. The Engineer-In-Charge shall also notify the Contractor of any defect in the works affecting completion.

71.3 The Contractor shall during the course of execution prepare and keep updated a complete set of ‘as built’ drawings to show each and every change from the Contract Drawings, changes recorded shall be countersigned by the Engineer-In-Charge and the Contractor. Four copies of ‘as built’ drawings shall be supplied to EPI by the Contractor within 30 days of the completion. All costs incurred in this respect shall be borne by the Contractor only.

72.0 COMPENSATION FOR DELAY AND REMEDIES

72.1 If the Contractor fails to maintain the required progress in terms of clause 72.4 or relevant clause of Additional Conditions of Contract, to complete the work and clear the Site on or before the completion date or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to EPI on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below or such smaller amount as the Engineer in charge (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day / week (as

applicable) that the progress remains below that specified in Clause 72.4.1 or the relevant clause in Additional Conditions of Contract or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified.

i) For works with completion period not exceeding 3 month (as originally stipulated) @ 1% per day

ii) For works with completion period exceeding 3 months (as originally stipulated) @ 1% per week or part thereof

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with EPI even after completion of the work.

72.2 CANCELLATION / DETERMINATION OF CONTRACT IN FULL OR PART

Subject to other provisions contained in this clause, the Engineer-In-Charge may, without prejudice to his any other rights or remedy against the Contract in respect of any delay, inferior workmanship, any claims for damages and / or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in full or in part in any of the following cases:

i) If the Contractor having been given by the Engineer-In-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workmanlike manner shall omit to comply with the requirement of such notice for a period of seven days thereafter; or

ii) If the Contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the ENGINEER-IN-CHARGE (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-In-Charge; or

iii) If the Contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that respect by the Engineer-In-Charge; or

iv) If the Contractor persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms

and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that respect by the Engineer-In-Charge; or

v) If the Contractor shall offer or give or agree to give to any person in EPI service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution of this or any other contract for EPI; or

vi) If the Contractor shall enter into a contract with EPI in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-In-Charge; or

vii) If the Contractor shall obtain a contract with EPI as a result of wrong tendering or other non-bona-fide methods of competitive tendering; or

viii) If the Contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or

ix) If the Contractor being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or

x) If the Contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or

xi) If the Contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of the labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without and prior written approval of the Engineer-In-Charge.

When the Contractor has made himself liable for action under any of the clauses aforesaid, the Engineer-In-Charge may without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to EPI, by a notice in

writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Engineer-In-Charge shall on such cancellation by EPI have powers to:

a) Take possession of Site and any materials, Construction Plant & machinery, implements, stores, etc. thereon; and/ or

b) Carry out the incomplete work by any means at the risk and cost of the Contractor; and/ or

c) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the Contractor under the hand of the Engineer-In-Charge shall be conclusive evidence). Upon such determination or rescission the full Retention Money recovered by EPI under the contract and Security Deposit cum Performance Guarantee shall be liable to be forfeited and un-used materials, construction plant & machinery, implements, temporary buildings, etc. shall be taken over and shall be absolutely at the disposal of EPI. If any portion of the Retention Money has not been received or recovered by EPI from RA Bills, it would be called for and forfeited; and/ or

d) To employ labour and to supply materials, equipment to carry out the work or any part of the work debiting the Contractor with the cost of the labour and the price of the materials, equipment rentals (of the amount of which cost and price certified by the Engineer-In-Charge shall be final and conclusive) against the Contractor and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the Contractor under the terms of his contract. The certificate of the Engineer-In-Charge as to the value of the work done shall be final and conclusive against the Contractor provided always that action under the sub-clause shall only be taken after giving notice in writing to the Contractor. Provided also that if the expenses incurred by the EPI are less than the amount payable to the Contractor at his agreement rates, the difference shall not be paid to the Contractor; and/ or

e) After giving notice to the Contractor to measure up the work of the Contractor and to take such whole, or the balance or part thereof as shall be un-executed or delayed with reference to the General Conditions of Contract clause no. 72.4.1 and/ or relevant clause of Additional Conditions of Contract, out of his hands and to give it to another Contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original Contractor if the whole work had been executed by him (of the amount of which excess the certificate in writing of the Engineer-In-Charge shall be final and conclusive) shall be borne and paid by the original Contractor and may be deducted from any money due to him by EPI under his contract or on any other account whatsoever or from his Retention Money, Security Deposit cum Performance Guarantee or the proceeds of sales of unused materials, construction plants & machinery, implements temporary buildings etc. thereof or a sufficient part thereof as

the case may be. If the expenses incurred by EPI are less than the amount payable to the Contractor at his agreement rates, the difference shall not be paid to the Contractor; and/ or

f) By a notice in writing to withdraw from the Contractor any items or items of work as the Engineer-In-Charge may determine in his absolute discretion and get the same executed at the risk and cost of the Contractor.

Any excess expenditure incurred or to be incurred by EPI in completing the works or part of the works or the excess loss or damages suffered or may be suffered by EPI as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to EPI in law be recovered from any moneys due to the Contractor on any account, and if such moneys are not sufficient the Contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Engineer-In-Charge shall have the right to sell any or all of the Contractors unused materials, Construction Plant, machinery, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the contract and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the contract and law.

Any sums in excess of the amounts due to EPI and unsold materials, Construction Plant etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by EPI of the works or part of the works is less than the amount which the Contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the Contractor.

In the event of anyone or more of the above courses being adopted by the Engineer-In-Charge the Contractor shall have no claim to compensation whatsoever for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the Contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-In-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified. Provided further that if any of the recoveries to be made, while taking action as per (d) and/or (e) above, are in excess of the Retention Money & Security Deposit cum Performance Guarantee forfeited, these shall be limited to the amount by which the excess cost incurred by the EPI exceeds the Retention Money & Security Deposit cum Performance Guarantee so forfeited.

72.3 CONTRACTOR LIABLE TO PAY COMPENSATION EVEN IF ACTION NOT TAKEN

In any case in which any of the powers conferred upon the Engineer-In-Charge by relevant clause thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the Contractor and the liability of the Contractor for compensation shall remain unaffected. In the event of the Engineer-In-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the Contractor, take possession of (or at the sole discretion of the Engineer-In-Charge which shall be final and binding on the Contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-In-Charge) all or any tools, plant, machinery, materials and stores, in or upon the works, or the site thereof belonging to the Contractor, or procured by the Contractor and intended to be used for the execution of the work / or any part thereof, paying or allowing for the same in account at the contract rates, or in the case of these not being applicable, at current market rates to be certified by the Engineer-In-Charge, whose certificate thereof shall be final, and binding on the Contractor and/or direct the Contractor, clerk of the works, foreman or other authorized agent to remove such tools, machinery, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the Contractor failing to comply with any such requisition, the Engineer-In-Charge may remove them at the Contractor's expense or sell them by auction or private sale on account of the Contractor and his risk in all respects and the certificate of the Engineer-In-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Contractor.

72.4 TIME ESSENCE OF CONTRACT & EXTENSION FOR DELAY

The time allowed for execution of the Works as specified in the terms of contract or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the works shall commence from the 10th Day or such time period as mentioned in letter of Intent after the date on which the Engineer-In-Charge issues written orders to commence the work. If the Contractor commits default in commencing the execution of the work as aforesaid, the Executing Agency shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.

72.4.1 Within 10 (Ten) days of Letter of Intent, the Contractor shall submit a Time and Progress Chart (CPM/ PERT/ Quantified Bar Chart) and get it approved by the Engineer-In-Charge. The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works. It shall indicate the forecast (mile-stones) of the dates of commencement and completion of various items, trades, sections of the work and may be amended as necessary by agreement between the Engineer-In-Charge and the Contractor within the limitations of time stipulated in the Contract documents, and further to ensure good progress during the execution of the work, the Contractor shall in all cases in which the time allowed for any work exceeds one month (save for

special jobs for which a separate program has been agreed upon) complete 1/8th of the whole of work before 1/4th of the whole time allowed in the contract has elapsed, 3/8th of the work before one half of such time has elapsed and 3/4th of the work before 3/4th of such time has elapsed. The physical report including photographs shall be submitted by the Contractor on the prescribed format & the intervals (not exceeding a month) as decided by the Engineer in Charge. The compensation for delay as per clause 72.1 shall be leviable at intermediate stages also, in case the required progress is not achieved to meet the above time deadlines of the completion period and/ or milestones of time and progress chart, provided always that the total amount of Compensation for delay to be paid under this condition shall not exceed 10% (Ten Percent) of the tendered value of work".

72.4.2 If the work(s) be delayed by:

i) force-majeure or
ii) abnormally bad weather, or
iii) serious loss or damage by fire, or
iv) civil commotion of workmen, strike or lockout, affecting any or the trades employed on the work, or
v) delay on the part of other Contractors or tradesmen engaged by Engineer-In-Charge in executing work not forming part of the Contract, or
vi) non-availability of stores, which are responsibility of EPI or,
vii) non-availability or break down of tools and plant to be supplied or supplied by EPI or,
viii) any other cause which, in the absolute discretion of EPI, is beyond the Contractor's control,

then, upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-In-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-In-Charge to proceed with the works.

72.4.3 Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. In any such case EPI may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the Engineer-In-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the Contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-In-Charge and the extension of time so given by the Engineer-In-Charge shall be binding on the Contractor.

73.0 WITHHOLDING AND LIEN IN RESPECT OF SUMS DUE FROM CONTRACTOR

73.1 Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the Contractor, EPI shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security,

if any, deposited by the Contractor and for the purpose aforesaid, EPI shall be entitled to withhold the Retention Money, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, EPI shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the Contractor under the same contract or any other contracts pending finalization or adjudication of any such claim.

73.2 It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-In-Charge or EPI will be kept withheld or retained as such by the Engineer-In-Charge or EPI till the claim arising out of or under the contract is determined by the Arbitrator / Competent Court and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor is a sole proprietor or a partnership firm or a limited company, etc. the Engineer-In-Charge or EPI shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to proprietor /partnership firm/limited company, as the case may be whether in his individual capacity or otherwise.

EPI shall have the right to cause an audit and technical examination of the works and the final bills of the Contractor including all supporting vouchers, abstract, etc, to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the Contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the Contractor shall be liable to refund the amount of over-payment and it shall be lawful for EPI to recover the same from him in the manner prescribed in sub-clause (I) of this clause or in any other manner legally permissible; and if it is found that the Contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by EPI to the Contractor, without any interest thereon whatsoever.

73.3 LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

Any sum of money due and payable to the Contractor (including the Retention Money & Security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-In-Charge or by EPI against any claim of the Engineer-In-Charge or EPI in respect of payment of a sum of money arising out of or under any other contract made by the Contractor with the Engineer-In-Charge or EPI.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-In-Charge or EPI will be kept withheld or retained as such by the Engineer-In-Charge or EPI or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the Arbitrator or Competent court as the case may be, and that the Contractor shall have no claim for interest or damages whatsoever on this account or on any

other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

74.0 DEFECTS LIABILITY PERIOD

The Contractor shall be responsible for the rectification of defects in the works for a period of twelve months from the date of taking over of the works by the Owner/ Client. Any defects discovered and brought to the notice of the Contractor forthwith shall be attended to and rectified by him at his own cost and expense. In case the Contractor fails to carry out these rectifications, the same may without prejudice to any other right or remedy available, be got rectified by EPI at the cost and expense of the Contractor.

75.0 FORCE MAJEURE

Any delay or failure of the performance of either party hereto shall not constitute default hereunder to give rise to any claims for damages, if any to the Extent such delay or failure of performance is caused by occurrences such as Acts of God or the public enemy, expropriation, compliance with any order or request of Government authorities/ Courts, acts of war, rebellions, sabotage fire, floods, illegal strikes, or riots (other than Contractor's employees). Only extension of time shall be considered for Force Majeure conditions as accepted by EPI. No adjustment in contract price shall be allowed for reasons of force majeure.

76.0 ARBITRATION

76.1 Before resorting to arbitration as per the clause given below, the parties if they so agree may explore the possibility of conciliation as per the provisions of Part-III of the Arbitration and Conciliation Act. 1996. When such conciliation has failed, the parties shall adopt the following procedure for arbitration :

i) Except where otherwise provided for in the contract, any disputes and differences relating to the meaning of the Specifications, Design, Drawings and Instructions herein before mentioned and as to the quality of workmanship or materials used in the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the Contract, Designs, Drawings, Specifications, Estimates, Instructions, or these conditions, or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the Sole Arbitration of the Chairman and Managing Director (CMD) of Engineering Projects (India) Limited (EPI), or any other person discharging the functions of CMD of EPI and if CMD or such person discharging the functions of CMD of EPI is unable to act, to the sole Arbitration of some other person appointed by CMD of EPI or such other person discharging the functions of CMD of EPI. There will be no objection if the arbitrator so appointed is an employee of Engineering Projects (I) Ltd. However, such an employee shall not have directly dealt with the said Contract or the works there under on behalf of EPI. Such Arbitrator shall be appointed within 30 days of the receipt of letter of invocation of arbitration duly satisfying the requirements of this clause.

ii) If the arbitrator so appointed resigns or is unable or unwilling to act due to any reason whatsoever, or dies, the Chairman & Managing Director aforesaid or in his absence the person discharging the duties of the CMD of EPI may appoint a new arbitrator in accordance with these terms and conditions of the contract, to act in his place and the new arbitrator so appointed may proceed from the stage at which it was left by his predecessor.

iii) It is a term of the contract that the party invoking the arbitration shall specify the dispute / differences or questions to be referred to the Arbitrator under this clause together with the amounts claimed in respect of each dispute.

iv) The Arbitrator may proceed with the arbitration ex-parte, if either party, in spite of a notice from the arbitrator, fails to take part in the proceedings.

v) The work under the contract shall continue as directed by the Engineer-In-Charge, during the arbitration proceedings.

vi) Unless otherwise agreed, the venue of arbitration proceedings shall be at the venue given in the 'Memorandum' to the 'Form of Tender'.

vii) The award of the Arbitrator shall be final, conclusive and binding on both the parties.

viii) Subject to the aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modifications or re-enactment thereof and the Rules made there under and for the time being in force shall apply to the arbitration proceedings and Arbitrator shall publish his Award accordingly.

NOTE

NOTWITHSTANDING ANYTHING CONTAINED HEREINABOVE, THIS CLAUSE SHALL NOT BE APPLICABLE WHERE THE DISPUTE IS BETWEEN EPI AND ANOTHER CENTRAL PUBLIC SECTOR ENTERPRISE OR GOVT. OF INDIA DEPARTMENT, FOR WHICH A SEPARATE ARBITRATION CLAUSE IS PROVIDED VIDE CLAUSE NO. 76.2 GIVEN BELOW :

76.2 ARBITRATION BETWEEN CENTRAL PUBLIC SECTOR ENTERPRISES INTER SE / GOVERNMENT OF INDIA DEPARTMENTS/ MINISTRIES

i) In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party to the arbitration as per the instructions (Office Memorandums / Circulars) issued by Govt. of India from time to time with regard to arbitration between one Government Department and another, one Government Department and a Public Sector Enterprise and Public Sector Enterprise inter se.

ii). Subject to any amendment that may be carried out by the Government of India from to time, the procedure to be followed in the arbitration shall be as is

contained in D.O. No. DPE/4(10)/2001-PMA-GL-I dated 22.01.2004 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India or any modification issued in this regard.

76.3 JURISDICTION

The courts mentioned in the 'Memorandum' to the 'Form of Tender' alone will have jurisdiction to deal with matters arising from the contract, to the exclusion of all other courts.

77.0 SUSPENSION OF WORKS

(a) The Contractor shall, on receipt of the order in writing of the Engineer-In-Charge, suspend the progress of the works or any part thereof for such time and in such manner, as the Engineer-In-Charge may consider necessary for any of the following reasons:

i) On account of any default on part of the Contractor, or

ii) For proper execution of the works or part thereof for reason other than the default of the Contractor, or

iii) For safety of the works or part thereof.

The Contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-In-Charge.

(b) If the suspension is ordered for reasons (ii) and (iii) in sub-para (a) above, the Contractor shall be entitled to an extension of the time equal to the period of every such suspension plus 25%. No adjustment of contract price will be allowed for reasons of such suspension.

(c) In the event of the Contractor treating the suspension as an abandonment of the contract by EPI, he shall have no claim to payment of any compensation on account of any profit or advantage which he may have derived from the execution of the work in full but which he could not derive in consequence of the abandonment.

(d) The Contractor shall resume work in all earnestness after suspension has been lifted by EPI.

78.0 TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

If the Contractor is an individual or a proprietorship concern and the individual or the proprietor dies then unless the Engineer-In-Charge is satisfied that the legal representatives of the individual Contractor or of the proprietor of the proprietary concern and in the case of partnership firm, the surviving partners, are capable of carrying out and completing the contract, the Engineer-In-Charge shall be entitled to cancel the contract as to its incompleted part without EPI being in any

way liable to payment of any compensation to the estate of the deceased Contractor and/or to surviving partners of the Contractor's firm on account of cancellation of the contract. Such cancellation of Contract shall be with out prejudice to any of the rights & remedies available to the Engineer-In-Charge under the contract. The decision of the Engineer-In-Charge that the legal representatives of the deceased Contractor or the surviving partners of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties.

79.0 CLARIFICATION AFTER TENDER SUBMISSION

Tenderer's attention is drawn to the fact that during the period, the bids are under consideration, the bidders are advised to refrain from contacting by any means, EPI and/or his employees/ representatives on matters related to the bid under consideration and that if necessary, EPI will obtain clarifications in writing or as may be necessary. The Tender evaluation and process of award of works is done by duly authorized Tender Scrutiny Committee and this committee is authorized to discuss and get clarification from the tenderers.

80.0 ADDENDA/ CORRIGENDA

Addenda/Corrigenda to the Tender Documents may be issued prior to the date of opening of the Tender to clarify or effect modification in specification and/or contract terms included in various Tender Documents. The tenderer shall suitably take into consideration such Addenda/Corrigenda while submitting his tender. The tenderer shall return such Addenda/ Corrigenda duly signed and stamped as confirmation of its receipt and submit alongwith the Tender Document. All Addenda/ Corrigenda shall be signed and stamped on each page by the tenderer and shall become part of the Tender and contract documents.

81.0 QUALITY ASSURANCE PROGRAMME

To ensure that the works/services under the scope of this contract are in accordance with the specifications, the Contractor shall adopt Quality Assurance Programme to control such activities at the necessary points. The Contractor shall prepare and finalize such Quality Assurance Programme within 15 days from letter of intent. EPI shall also carryout quality audit and quality surveillance of systems and procedures of Contractor's quality control activities. A Quality Assurance Programme of Contractor shall generally cover the following:

a) His organization structure for the management and implementation of the proposed Quality Assurance Program.
b) Documentation control system.
c) The procedure for procurement of materials and source inspection.
d) System for site controls including process controls.
e) Control of non-conforming items and systems for corrective actions.
f) Inspection and test procedure for site activities.
g) System for indication and appraisal of inspection status.
h) System for maintenance of records.
i) System for handling, storage and delivery.

j) A quality plan detailing out quality practices and procedures, relevant standards and acceptance levels for all types of work under the scope of this contract.

All the quality reports shall be submitted by the Contractors in the formats appended hereto. Checklist enclosed here in this document shall be followed while carrying out Construction activities (items). If any item is not covered by the Checklist/ Formats appended hereto, the Format for the same may be developed and submitted to Engineer-In-Charge for approval and the same shall be adopted. These filled in formats shall be prepared in two copies and duly signed by representatives of Contractor and EPI. All the costs associated with printing of Formats and testing of materials required as per technical specifications or by Engineer-In-Charge shall deemed to be included in the Contractor's quoted rates of various items of work in the Schedule/ Bill of Quantities.

82.0 APPROVAL OF TEMPORARY / ENABLING WORKS

The setting and nature of all offices, huts, access road to the work areas, and all other temporary works as may be required for the proper execution of the works shall be subject to the approval of the Engineer-In-Charge.

All the equipments, labour, material including cement, reinforcement and the structural steel required for the enabling/ temporary works associated with the entire Contract-shall have to be arranged by the Contractor only. Nothing extra shall be paid to the Contractor on this account and the unit rates quoted by the Contractor for various items in the Bill of Quantities shall be deemed to include the cost of enabling works.

83.0 CONTRACT COORDINATION PROCEDURES, COORDINATION MEETINGS AND PROGRESS REPORTING

The Contractor shall prepare and finalize in consultation with EPI, a detailed contract coordination procedure within 15 days from the date of issue of Letter of Intent for the purpose of execution of the Contract.

The Contractor shall have to attend all the meetings at any place in India at his own cost with EPI, Owners/ Clients or Consultants of EPI/ Owner/ Client during the currency of the Contract, as and when required and fully cooperate with such persons and agencies involved during these discussions. The Contractor shall not deal in any way directly with the Clients/ Owners or Consultants of EPI/ Owner/ Clients and any dealing/ correspondence if required at any time with Clients/ Owners/ Consultants shall be through EPI only.

During the execution of the work, Contractor shall submit at his own cost detailed Monthly progress report to the Engineer-In-Charge of EPI by 5th of every month. The format of monthly progress report shall be as approved by Engineer-In-Charge of EPI.

84.0 CONTRACT AGREEMENT

The Contractor shall enter into a Contract Agreement with EPI within 10 days of the date of Letter of Intent or within such extended time, as may be granted by EPI. The cost of stamp papers, stamp duty, registration, if applicable on the contract, shall be borne by the Contractor. In case, the Contractor does not sign the agreement as above or does not start the work within 10 days of the issue of letter/telegram of intent, his earnest money is liable to be forfeited and letter of intent consequently will stand withdrawn.

85.0 MANNER OF EXECUTION OF AGREEMENT

i. The agreement as per prescribed Performa as enclosed to the Additional Conditions of Contract shall be signed at the office of EPI within 10 days from the date of issue of Letter of Intent. The Contractor shall provide for signing of the Contract, appropriate Power of Attorney in favour of the authorised representative duly attested by notary Public and the requisite documents/materials. Till a formal contract is prepared and executed, the Letter of Intent read in conjunction with the Bidding Documents will constitute a binding contract.

ii. The agreement will be signed in two originals and three more copies, EPI shall retain the 'Original', the Contractor shall be provided with the other signed original and the remaining three copies will be retained by EPI. In case of a dispute of any kind whatsoever, the 'Original" retained by EPI alone shall be treated as the 'Original Agreement'.

iii. The Contractor shall provide free of cost to EPI all the Engineering data, drawings and descriptive materials submitted along with the bid, in at least five (5) copies to form an integral part of the Agreement within seven 7 days after issuing of Letter of Intent.

iv. Subsequent to signing of the Agreement, the Contractor at his own cost shall provide to EPI with at least five (5) true hard bound copies of Agreement alongwith all the enclosures viz. letter of intent, Tender Documents etc. within thirty (30) days of its signing.

86.0 PURCHASE PREFERENCE TO PUBLIC SECTOR ENTERPRISES

EPI reserves its right to extend Purchase Preference to Central Public Sector Enterprises (CPSEs) as per policy of Government of India, if any, as applicable on this work. The tenderers are requested to go through latest instructions of Government of India on its Purchase Preference Policy for CPSEs before quoting for the Tender.

87.0 CHANGE IN FIRM'S CONSTITUTION TO BE INTIMATED

Where the Contractor is a partnership firm, prior approval in writing of EPI shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership agreement whereunder the partnership firm would have the right to carry out the works hereby undertaken by the Contractor. If prior approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in

contravention of Clause 59.1 hereof and EPI shall be entitled to take action under Clause 72.2 (xi).

88.0 COMPLIANCE WITH ISO PROCEDURES

EPI is an IS0-9001 and ISO-14001 Company. The conditions of the ISO as applicable shall be followed by the Contractor for implementation & maintaining the established procedures of EPI.

LABOUR SAFETY PROVISIONS

1.0 Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal and 1 vertical).

2.0 Scaffolding or staging more than 3.6m (12 feet) above the ground or floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3 feet) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

3.0 Working platforms, gangways, and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6m (12 feet) above ground level or floor level, they should be closely boarded, should have adequate width & should be suitable fastened as described in (2.0) above.

4.0 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3 feet).

5.0 Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30 feet) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. for ladder up to and including 3m (10 feet) in length. For longer ladders this width should be increased at least 1/4” for each additional 30 cm (1 ft.) of length. Uniform step spacing shall not exceed 30 cm (12”). Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of the work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defence of every suit, action or other proceeding at law that may be brought by an person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may, with the consent of the Contractor, be paid to compensate any claim by any such person.

6.0 EXCAVATION AND TRENCHING

All trenches, 1.2mts.(four feet) or more in depth, shall at all times be supplied with at least one ladder for each 30m. (100 feet) in length or fraction thereof, Ladder shall be extended from bottom of the trench to at least 90 cm (3feet) above the surface of the ground. The sides of the trenches, which are 1.5m. (5feet) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger or sides to collapsing. The excavated materials shall not be placed within 1.5m (5 feet) of the edges of the

trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

7.0 Demolition - Before any demolition work is commenced and also during the progress of the work:

7.1 All roads and open areas adjacent to the work Site shall either be closed or suitably protected.

7.2 No electric cable or apparatus which is likely to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.

7.3 All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion or flooding. No floor, roof or other part of the building shall be overloaded with debris or materials as to render it unsafe.

8.0 All necessary personal safety equipments as considered adequate by the Engineer-In-Charge should be kept available for the use of persons employed on the Site and maintained in a condition suitable for immediate use, and the Contractor should take adequate step to ensure proper use of equipment by those concerned- The following safety equipment shall be invariably provided.

8.1 Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.

8.2 Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eye shall be provided with protective goggles.

8.3 Those engaged in welding works shall be provided with welder's protective eye shields.

8.4 Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe interval.

8.5 When workers are employed in sewers and manholes, which are in active use, the Contractors shall ensure that the manhole covers are opened and ventilated at-least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident the public. In addition, the Contractor shall ensure that the following safety measures are adhered to:

a. Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
b. At least 5 to 6 manholes upstream and down stream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manholes for working inside.
c. Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
d. Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.

e. Safety belt with rope should be provided to the workers. While working inside the manholes such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

f. The area should be barricaded or cordoned of by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.

g. No smoking or open flames shall be allowed near the blocked manhole being cleaned.

h. The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.

i. Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer In-charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.

j. Gas masks with Oxygen Cylinder should be kept at Site for use in emergency.

k. Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air-blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non-sparking gas engines also could be used but they should be placed at-least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.

l. The workers engaged for cleaning the manholes/ sewers should be properly trained before allowing them to work in the manhole. m. The workers shall be provided with Gumboots or non-sparking shoes, bump helmets and gloves non-sparking tools, safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.

n. Workmen descending a manhole shall try each ladder step or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.

o. If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.

p. The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-In-Charge regarding the steps to be taken in this regard in an individual case will be final.

8.6 The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form Wherever men above the age of 18 are employed on the work of lead painting the following precautions should be taken.

8.6.1 No paint containing lead or lead products shall be used except in the form of paste or readymade paint.

8.6.2 Suitable facemasks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

8.6.3 Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.

8.6.4.1 a. White lead, sulphate or lead work products containing those pigments shall not be used in painting operation except in the form of paste or of paints ready for use.

b. Measures shall be taken whenever required in order to prevent danger arising from the application of paint in the form of spray.

c. Measures shall be taken, whenever practicable to prevent danger arising out of dust caused by dry rubbing down and scrapping.

8.6.4.2 a. Adequate facilities shall be provided to enable working painter to wash during and on cessation of work.

b. Suitable arrangements shall be made to prevent clothing put off during working hours being spoiled by painting materials.

8.6.4.3 a) Cases of lead poisoning and of suspected lead poisoning shall be notified and shall be subsequently verified by a medical man appointed by the competent authorities of the Consultant.

b) EPI may require when necessary a medical examination of workers.

c) Instructions with regard to the special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

9.0 When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provisions should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.

10.0 Use of hoisting machines and tackle including their attachment encourage and supports shall conform to the following standard of conditions.

10.1 a. These shall be of good mechanical construction, sound material and adequate strength and free from patent, defects and shall be kept required in good working order.

b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

10.2 Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of any hoisting machine including any scaffolding, winch or giving signals to operator.

10.3 In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

10.4 In case of EPI machines, the safe working load shall be notified by the Engineer-In-Charge. As regards Contractor's machines the Contractor shall notify the safe working load of the machine to the Engineer-In-Charge whenever he brings any machinery to Site of work and get verified by the Engineer-In-Charge.

11.0 Motors gearing, transmission electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguard, hosting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel, such as gloves sleeves and boots as may be necessary, be provided. The worker should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.

12.0 All scaffold, ladders, and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

13.0 These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place of work spot. The person responsible for compliance of the safety codes shall be named therein by the Contractor.

14.0 To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Contractor shall be open to inspection by the or their representatives.

15.0 Notwithstanding the above Clauses from (i) to (xiv) there is nothing in these to exempt the Contractor from the operations of any other Act or Rule in force in the Republic of India.

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS

1.0 APPLICATION

These rules shall apply to all building and construction works in which 20 (twenty) or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the Contractor work is in progress.

2.0 DEFINITION

Work place means a place where twenty or more workers are ordinarily employed or are proposed to be employed in connection with construction work on any day during the period during which the Contractor work is in progress.

3.0 FIRST-AID FACILITIES

3.1 At every work place first aid facilities shall be provided and maintained, so as to be easily accessible during working hours, First-Aid boxes at the rate of not less than one box per 150 contract labour or part thereof ordinarily employed.

3.2 The First-Aid box shall be distinctly marked with a red cross on white ground and shall contain the following equipments:-

3.2.1 a) For work places in which number of contract labour employed does not exceed 50, Each First-Aid box shall contain the following equipments:

i) 6 small sterilized dressings.
ii) 3 medium size sterilized dressings.
iii) large size sterilized dressings.
iv) 3 large sterilized burn dressings.
v) 1 (30 ml) bottle containing a two percent alcoholic solution of iodine.
vi) 1(30 ml) bottle containing salvolatile having the dose and mode of administration indicated on the label.
vii) 1 snake-bite lancet.
viii) 1 (30 gms) bottle of potassium permanganate crystals.
ix) 1 pair of scissors.
x) 1 copy of the First-Aid leaf-let issued by the Director General, Factory Advise Service & Labour Institutes, Government of India.
xi) 1 bottle containing 100 tablets (each of 5 grams) of aspirin.
xii) Ointment for burns.
xiii) A bottle of suitable surgical antiseptic solution.

3.2.2 For work places in which the number of contract labour exceed 50. Each First-Aid box shall contain the following equipments:

i) 12 small sterilized dressings.
ii) 6 medium size sterilized dressings.
iii) 6 large size sterilized dressings.
iv) 6 large size sterilized burn dressings.
v) 6 (15 gms) packet sterilized cotton wool.
vi) 1 (60 ml.) bottle containing a two percent iodine alcoholic solution.
vii) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
viii) 1 roll of adhesive plaster.
ix) 1 snake – bite lancet.
x) 1 (30 gms.) bottle of potassium permanganate crystals.
xi) 1 pair of scissors.
xii) 1 copy of the First-Aid leaf-let issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
xiii) A bottle containing 100 tablets (each of 5 grams) of aspirin.
xiv) Ointment for burns.
xv) A bottle of suitable surgical antiseptic solution.

3.3 Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.

3.4 Nothing except the prescribed contents shall be kept in the First Aid box.

3.5 The First Aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.

3.6 A person in charge of the First-Aid box shall be a person trained in First-Aid treatment, in work places where the number of labour employed is 150 or more.

3.7 In work places where the number of labour employed is 500 or more and hospital facilities are not available within easy distance of the works, first-Aid Posts shall be established and run by a trained Compounder. The Compounder shall be on duty and shall be available at all hours when the workers are at work.

3.8 Where work places are situated in places, which are not towns of cities, a suitable motor transport shall be kept readily available to carry injured person or persons suddenly taken ill to the nearest hospital.

4.0 DRINKING WATER

4.1 In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.

4.2 Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.

4.3 Every water supply of storage shall be at a distance of not less than 50 feet from any latrines drain or other source of pollution, Where water has to be drawn from

an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap-door which shall be dust and waterproof.

4.4 A reliable pump shall be fitted to each covered well, trap-door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5.0 WASHING FACILITIES

5.1 In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of labour employed herein.

5.2 Separate and adequate screening facilities shall be provided for the use of male and female workers.

5.3 Such facilities shall be conveniently accessible and shall be kept clean and hygienic condition.

6.0 LATRINES AND URINALS

6.1 Latrines shall be provided in every work place on the following scale, namely:

a) Where females are employed there shall be at least one latrine for every 25 females.

b) Where males are employed, there shall be at least one latrine for every 25 males.

Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females, as the case may be, up to the first 100, and one for every 50 thereafter.

6.2 Every latrine shall be under cover and so partitioned off as to secure privacy, and shall has a proper door and fastenings.

6.3 Construction of Latrines: The inside walls shall be constructed of masonry or some suitable heat resisting non-absorbent materials and shall be cement washed inside and outside at least once a year. Latrine shall not be a standard lower than borehole system.

6.4 (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers “For Men only” or “For Women only” as the case may be.

(b) The notice shall also bear the figure of man or of a women, as the case may be.

6.5 There shall be at least one urinal for male workers up to 50and one for female workers up to 50 employed at a time. Provided that where the number of male or female workmen, as the case may be, exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereof, thereafter.

6.6 a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.

b) Latrines and urinals other than those connected with a flush sewerage system shall comply with the requirements of the Public Health Authorities.

6.7 Water shall be provided by means of a tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.

6.8 DISPOSAL OF EXCRETA

Unless otherwise arranged for by the local sanitary authority arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternatively excreta may be disposed off by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm layer of waste or for refuse and then covering it with a layer of earth for fortnight (when it will turn into manure).

6.9 The Contractor shall, at his own expense, carry out all instruction issued to him by the Engineer-In-Charge to effect proper disposal of night soil and other conservancy work in respect of the Contractor's workmen or employees on the Site. The Contractor shall be responsible for payment of any charges, which may be levied by Municipal or Cantonment Authority for execution of such work on his behalf.

7.0 PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost four suitable sheds, two for males and the other two for rest separately for the use of man and women labour. The height of each shelter shall not be less than 3 meters from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm. Per head.

Provided that the Engineer-In-Charges may permit, subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8.0 CRECHES

8.1 A every work place, at which 20 or more women workers are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a playroom for the children and the other as their bedrooms.

The rooms shall be constructed on standard not lower than the following:

i) thatched roof
ii) mud floor and walls.
iii) planks spread over the mud floor and covered with matting

8.2 The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.

8.3 The Contractor shall supply adequate number of toys and games in the playroom and sufficient number of cots and beddings in the bedroom.

8.4 The Contractor shall provide one Ayaa to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.

8.5 The use of the rooms/earmarked as ealize shall be restricted to children, their attendant and mother of the children.

9.0 CANTEENS

9.1 In every work place where the work regarding the employment of contract labour is likely to continue for six months and wherein contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the Contractor for the use of such labour.

9.2 The canteen shall be maintained by the Contractor in an efficient manner.

9.3 The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.

9.4 The canteen shall be sufficiently lighted at all times when any person has access to it.

9.5 The floor shall be made of smooth and impervious material and inside walls shall be lime washed or colour washed at least once in each year.

Provided that the inside walls of the kitchen shall be lime-washed every four months.

9.6 The premises of the canteen shall be maintained in a clean and sanitary condition.

9.7 Waste Water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.

9.8 Suitable arrangements shall be made for the collection and disposal of garbage.

9.9 The dinning hall shall accommodate at a time 30 persons of the labour working at time.

9.10 The floor area of the dinning hall, excluding the area occupied by the service counter and any furniture except tables and chair shall not be less than one square meter per dinner to be accommodated.

9.11 a) A portion of the dinning hall, and service counter shall be partitioned off and reserved for women workers in proportion to their number.

b) Washing places for women shall be separate and screened to secure privacy.

9.12 Sufficient tables, stool, chairs or benches shall be available for the number of dinners to be accommodated.

9.13.1 a) There shall be provided and maintained sufficient utensils, crockery, furniture and any other equipment necessary for the efficient running of the canteen.

b) The furniture, utensils and other equipment shall be maintained in a clean and hygienic condition.

9.13.2 a) Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.

b) A service counter, if provided, shall have top of smooth and impervious material.

c) Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.

9.14 The foodstuffs and other items to be served in the canteen shall be in conformity with the normal habits of the labour.

9.15 The charge for food stuffs, beverages and any other items served in the canteen shall be based on ‘No profit No loss’ and shall be conspicuously displayed in the canteen.

9.16 In arriving at price of foodstuffs, and other articles served in the canteen, the following items shall not be taken into consideration as expenditure, namely:

a) The rent of land building.

b) The depreciation and maintenance charges for the building and equipment provided for the canteen.

c) The cost of purchase, repair and replacement of equipment including furniture, crockery, cutlery and utensils:

d) The water charges and other charges incurred for lighting and ventilation:

e) The interest and amounts spent on the provision and maintenance and equipment provided for in the canteen.

9.17 The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10.0 ANTI MALARIAL PRECAUTIONS

The Contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-In-Charge including the filling up of any borrows pits which may have been dug by him.

11.0 AMENDMENTS

EPI may from time to time, add to or amend these rules and issue such directions as it may consider necessary for the purpose of removing any difficulty which may arise in the administration hereof.

CONTRACTOR'S LABOUR REGULATIONS

1.0 SHORT TITLE

These regulations may be called the Contractor "Labour Regulations".

2.0 DEFINITIONS

2.1 "Workman" means any person employed by EPI or its Contractor directly or indirectly through a sub-Contractor, with or without the knowledge, of EPI to do any skilled, semi-skilled, unskilled, manual, supervisory, technical or clerical work for hire or reward, whether, the terms of employment are expressed or implied but does not include any person-

a) Who is employed mainly in a managerial or administrative capacity; or

b) Who being employed in a supervisory capacity draws wages exceeding Rupees Two thousand Five hundred per person or exercises either by the nature of the duties attached to the office or by reason of powers vested to him, functions mainly of managerial nature.

c) Who is an out worker, that is to say, a person to whom any articles or materials are given out by or on behalf of the principal Employer to be made up cleaned, washed, altered, ornamental finished, repaired, adopted or otherwise processed for sale for the purpose of the trade or business of the principal Employer and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal Employer.

2.2 "Fair Wages" means wages whether for time or piecework fixed and notified under the provisions of the minimum Wages Act from time to time.

2.3 "Contractor" shall include every person who undertake to produce a given result other than a mere supply of goods or articles of manufacture through labour or who supplies labour for any work and includes a sub-Contractor.

2.4 "Wages" shall have the same meaning as defined in the Payment of Wages Act.

2.4.1 Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.

2.4.2 When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week he shall be paid overtime for the extra hours put in by him at double the ordinary rate of wages.

2.4.3.1 Every worker shall be given a weekly holiday on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time, irrespective of whether such worker is governed by the Minimum Wages Act or not.

2.4.3.2 Whether the Minimum Wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same Contractor for a continuous period of not less than 6 days.

2.4.3.3 here a Contractor is permitted by the Engineer-In-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substitute holiday to him for the whole day on one of the five days immediately before or after the normal weekly holidays and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

3.0 DISPLAY OF NOTICE REGARDING-WAGES, ETC.

The Contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers, giving the minimum rates of wages fixed under the Minimum Wages Act, the actual wages being paid, the hours of work for which such wages are earned, wage period, dates of payment of wages and other relevant information as per Appendix ‘A’.

4.0 PAYMENT OF WAGES

4.1 The Contractor shall fix wage periods in respect of which wages shall be payable.

4.2 No wage period shall exceed one month.

4.3 The wages of every person employed as labour in an establishment or by a Contractor where less than one thousand, such persons are employed shall be paid before the expiry of the seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.

4.4 Where the employment of any worker is terminated by or on behalf of the Contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.

4.5 All payments of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.

4.6 Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.

4.7 All wages shall be paid in current coin or currency or in both.

4.8 Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.

4.9 A notice showing the wage period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the Contractor to the Engineer-In-Charge under acknowledgment.

4.10 It shall be the duty of the Contractor to ensure the disbursement of wages in the presence of the Engineer or any other authorized representatives of the Engineer-In-Charge who will be required to be present at the place and time of disbursement of wages by the Contractor to workmen.

4.11 The Contractor shall obtain from the Engineer or any other authorized representative of the Engineer-In-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form :

"Certified that the amount shown in column No…..... has been paid to the workmen concerned in my presence on…..... at …....."

5.0 FINES AND DEDUCTIONS, WHICH MAY BE MADE FROM WAGES

5.1 The wages of a worker shall be paid to him without any deduction of any kind except the following :

a) Fines

b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.

c) Deduction for damage to or loss of goods expressly entrusted to the employed persons for custody, or from loss of money or any other deduction which he is required to account where such damage or loss is directly attributable to his neglect or default.

d) Deduction for recovery of advances or for adjustment of over payment of wages, advances granted shall be entered in a register.

e) Any other deduction, which the Central Government may from time to time allow.

5.2 No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner.

NOTE: An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-I.

5.3 No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.

5.4 The total amount of fine which may be imposed in any one-wage period on a worker shall not exceed an amount equal to three paise in a Rupee of the total wages, payable to him in respect of that wage period.

5.5 No fine imposed on any worker shall be recovered from him in installment, or after the expiry of sixty days from the date on which it was imposed.

5.6 Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

6.0 LABOUR RECORDS

6.1 The Contractor shall maintain a “Register of persons employed” on work on contract in form XIII of the CL (R&A) Central Rules 1971 (Appendix-B).

6.2 The Contractor shall maintain a “Muster Roll” register in respect of all workmen employed by him on the work under contract in from XVI of the CL (R&A) Rules 1971 (Appendix-C).

6.3 The Contractor shall maintain a “Wage Register” in respect of all workmen employed by him on the work in form (Appendix-D).

6.4 Register of accidents – The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:

a) Full particulars of the labourers who met with accident.
b) Rate of wages
c) Sex
d) Age
e) Nature of accident and cause of accident.
f) Time and date of accident.
g) Date and time when he/she admitted in Hospital
h) Date of discharge from the Hospital
i) Period of treatment and result of treatment
j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
k) Claim required to be paid under Workmen’s Compensation Act.
l) Date of payment of compensation.
m) Amount paid with details of the person to whom the same was paid.
n) Authority by whom the compensation was assessed.
o) Remarks.

6.5 Register of Fines – The Contractor shall maintain a “Register of Fines” in the form

(Appendix-H).

The Contractor shall display in a good condition and in a conspicuous place of work the approved list of Acts and Omission for which fines can be imposed (Appendix-I).

6.6 Register of Deductions-The Contractor shall maintain a “Register of Deductions” for damage or loss in form (Appendix-J).

6.7 Register of Advances-The Contractor shall maintain a “Register of Advances” in form (Appendix-K).

6.8 Register of Overtime-The Contractor shall maintain a “Register of Overtime” in form (Appendix-L).

7.0 ATTENDANCE CARD-CUM WAGE SLIP:

7.1 The Contractor shall issue an attendance card-cum-wage slip to each workman employed by him in the specimen form at (Appendix-E).

7.2 The card shall be valid for each wage period.

7.3 The Contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.

7.4 The card shall remain in possession of the worker during the wage period under reference.

7.5 The Contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.

7.6 The Contractor shall obtain the signature or thump impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

8.0 EMPLOYMENT CARD

The Contractor shall issue an Employment Card in form to each worker within three days of the employment of the worker (Appendix-F).

9.0 SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the Contractor shall issue to the workman whose services have been terminated, a service certificate in from Appendix-G.

10.0 PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 and 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-In-Charge, Labour Officer.

11.0 POWER OF LABOUR OFFICERS TO MAKE INVESTIGATIONS INQUIRY

The Labour Officer or any other person authorized by EPI on its behalf shall have power to make inquires with a view to ascertaining and enforcing due and proper observance of the Fair Wage Clauses and the Provisions of Regulations. He shall investigate into any complaint regarding the default made by the Contractor or sub-Contractor in regard to such provision.

12.0 INSPECTION OF BOOK AND SLIPS

The Contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour officer or any other person, authorized by the Central Government on his behalf.

13.0 SUBMISSION OF RETURNS

The Contractor shall submit periodical returns as may be specified from time to time.

14.0 AMENDMENTS

EPI may from to time, add or amend the regulations and on any question as to the application, interpretation or effect of these regulations the decision of the Zonal Chief concerned shall be final.

Appendix – 'A'

LABOUR BOARD

Name of work

Name of Contractor

Address of Contractor

Name and Address of Unit

Name of Labour Enforcement Officer

Address of Labour Enforcement Officer

Date:

S. No.	Category	Minimum wage fixed	Actual wages paid	Number present	Remarks

Weekly Holiday

Wage Period

Date of Payment of wages

Working hours

Rest interval

Appendix – 'B'

FORM 13

SEE RULE 75

REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR

Name and Address of Contractor

Name and Address of Establishment in/
under which contract is carried on

Nature and location of work

Name & Address of Principal Employer

Sl. No.	Name and surname of workman	Age & sex	Father's Husbands Name	Nature of employment / designation	Permanent home address of the workman (village and Tehsil Taluk and District)	Local addre ss
1	**2**	**3**	**4**	**5**	**6**	**7**

Date of commencement of employment	Signature or thumb impression of the workman	Date of termination of employment	Reasons for termination	Remarks
8	**9**	**10**	**11**	**12**

Appendix – 'C'

FORM XVI

(See Rule 78(2) (193)

MUSTER ROLL

Name and address of Contractor

Name and address of establishment in/under which contract is carried on

Nature and location of work

Name and Address of Principal Employer

For the month / fortnight

S.No.	Name of the workman	Sex	Father's / Husband's Name	Dates	Remarks
1.	2	3	4	5.	
				1 2 3 4 5	

Appendix – 'D'

FORM XVII

[SEE RULE 78(2) (03)]

REGISTER OF WAGES

Name and address of Contractor

Name and address of establishment in/under which contract is carried on

Nature and location of work

Name and Address of Principal Employer

Wage period: per month/ fortnightly

S. No.	Name of Workman	Serial No. in the register of workman	Designation nature of work done	Nos. of days worked	Units of work done	Daily rate of wages/ piece rate	Basic Wages
1	2	3	4	5	6	7	8

Dearness allowance	Overtime	Other cash payments (Nature of payments to be indicated)	Total	Duration if any (indicate)	Net Amt paid	Signature thumb impression of the workman	Initial Contractor or his representative
9	10	11	12	13	14	15	16

Appendix – 'E'

FORM XIX

[SEE RULE 78 (2) (B)]

W A G E S L I P

Name and address of Contractor

Name and Father's/Husband's Name of workman

Nature and location of work

For the Week/Fortnight/Month ending

1. No. of days worked

2. No. of Units worked in case of piece rate workers

3. Rate of daily wages/piece rate

4. Amount of overtime wages

5. Gross wages payable

6. Deductions if any

7. Net amount of wages paid

Sign of the Contractor

Appendix – 'E'

WAGE CARD

WAGE CARD NO.

NAME AND ADDRESS OF CONTRACTOR DATE OF ISSUE

NATURE OF WORK WITH LOCATION DESIGNATION

NAME OF WORKMAN MONTH/FORTNIGHT

RATE OF WAGES

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
26 27 28 29 30 31

MORNING RATE

EVENING AMOUNT

INITIAL

RECEIVED FROM THE SUM OF RS. ON ACCOUNT
OF MY WAGON.

SIGNATURE

THE WAGE CARD IS VALID FOR ONE MONTH FROM THE DATE OF ISSUE.

Appendix – 'F'

FORM XIV

(SEE RULE 76)

EMPLOYMENT CARD

Name and address of Contractor

Name and address of establishment under which

The contract is carried out

Nature and location of work

Name and address of Principal Employer

1. Name of the workman
2. S. Name in the register of workman employed
3. Nature of Employment/Designation
4. Wage rate (with particulars of unit in case of piece work)
5. Wage Period
6. Tenure of employment
7. Remarks

Signature of Contractor

Appendix – 'G'

FORM XV

(SEE RULE 77)

SERVICE CERTIFICATE

Name and address of Contractor

Nature and location of work

Name and address of workman

Age or date of birth

Identification Marks

Father's/Husband's Name

Name and address of establishment in under which contract is carried on

Name and address of Principal Employer

Total period of which employed

S.No.	From	To	Nature of work	Rate of wages (with particular s of unit In case of piece work)	Remarks
1	2	3	4	5	6

Signature

Appendix – 'H'

FORM XII

[SEE RULE 78 (2) (D)]

REGISTER OF FINES

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

Name and address of workman

Name and address of Principal Employer

S.No.	Name of workman	Father's/Husband Name	Designation/nature of employment	Act/Omission for which fine imposed	Date of offence
1	2	3	4	5	6

Whether workman showed causes against fine	Name of person in whose presence employees explanation was heard	Wage period and wages payable	Amount of fine Imposed	Date on which fine realized	Remarks
7	8	9	10	11	12

Appendix – 'I'

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with rule of Labour Regulations, to be displayed prominently at the Site of work both in English and local language.

1. Willful insubordination or disobedience, whether alone or in combination with other.
2. Theft, fraud or dishonestly in connection with Contractors beside a business or property of EPI.
3. Taking or giving bribes or any illegal gratifications.
4. Habitual late attendance.
5 Drunk-ness fighting riotous or disorderly or indifferent behaviour.
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked.
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of EPI or of the Contractor.
10. Sleeping on duty.
11. Malingering or slowing down work.
12. Giving the false information regarding name, age, fathers name etc.
13. Habitual loss of wage cards supplied by the Employer.
14. Unauthorized use of Employers property or manufacturing or making of unauthorized articles at the work place.
15. Bad workmanship in construction and maintenance by skilled workers, which is not approved by EPI for which the Contractors are compelled to undertake rectifications.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishment.
18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the Employer.
20. Holding meeting inside the premises without previous sanction of the Employers.
21. Threatening or intimidating any workman or employee during the working hours within the premises.

Appendix – 'J'

FORM XX

[SEE RULE 78 (2) (D)]

REGISTER OF DEDUCTION FOR DAMAGES OR LOSS

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

Name and address of Principal Employer

S.No.	Name of workman	Father's/Husband Name	Designation/nature of employment	Particulars of damage or loss	Date of damage/loss
1	2	3	4	5	6

				Date of recovery		
Whether workman showed cause against deductions	Name of person in whose presence employees explanation was heard	Amount of deduction Imposed	No. of installment	First Installment	Last Installment	Remarks
7	8	9	10	11	12	13

Appendix – 'K'

FORM XXII

[SEE RULE 78(2)]

REGISTER OF ADVCANCES

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

Name and address of Principal Employer

S.No.	Name of workman	Father's/Husband Name	Designation/nature of employment	Wages period and wages payable	Date and amount of advance given
1	2	3	4	5	6

Purpose / for which advance made	No. of installments by which advance is to be paid	Date and amount of each installment repaid	Date on which last installment was repaid	Remarks
7	8	9	10	11

Appendix – 'L'

FORM XXIII

[See Rule 78(2) (E)]

REGISTER OF OVERTIME

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

Name and address of Principal Employer

S.No.	Name of workman	Father's/Husband Name	Sex	Designation/ nature of employment	Date on which overtime worked
1	2	3	4	5	6

Total overtime worked or production in case of piece rated	Normal rate of wages	Overtime rate of wages	Overtime earning	Rate on which overtime wages paid	Remarks
7	8	9	10	11	12

APLICATION FOR EXTENSION OF TIME

(To be completed by the Contractor)

P A R T –I

1. Name of Contractor

2. Name of the work as given in the Agreement

3. Agreement No.

4. Estimated amount put to Tender

5. Date of commencement work as per agreement

6. Period allowed for completion of work as per agreement

7. Date of completion stipulated as per agreement

8. Period for which extension of time has been given previously
   Extension granted

a)	First extension vide Engineer-in-charge letter No… ……date	Months	Days
b)	2nd extension vide Engineer-in-charge letter No…… date	Months	Days
c)	3rd extension vide Engineer-in-charge letter No……. date	Months	Days
d)	4th extension vide engineer-in-charge letter No……. date	Months	Days

   Total extension previously given

9. Reasons for which extension have been previously given (copies of the previous application should be attached)

10. Period for which extension is applied for:

11. Hindrances on account of which extension is applied for with dates on which hindrances occurred, and the period for which these are likely to last.

    a) Serial No.

    b) Nature of hindrance

c) Date of Occurrence

d) Period for which it is likely to last

e) Period for which extension required for this particular hindrance.

f) Over lapping period, if any, with reference to item

g) Net extension applied for

h) Remarks, if any

Total period for which extension is now applied for on account of hindrances mentioned above …… Month/ days.

12. Extension of time required for extra work.

13. Details of extra work and on the amount involved:

a) Total value of extra work
b) Proportionate period of extension of time based on estimated amount put to tender on account of extra work.

14. Total extension of time required for 11 & 12
Submitted to the Engineer-In-Charges office.

SIGNATURE OF CONTRACTOR

DATE

APPLICATION FOR EXTENSION OF TIME

(PART – II)

1. Date of receipt of application from Contractor for the work in the Engineer-In-Charge office.

2. Acknowledgement issued by Engineer-In-Charge vide his letter No dated

3. Engineer-In-Charge remarks regarding hindrances mentioned by the Contractor.

   i) Serial No.

   ii) Nature of hindrance

   iii) Date of occurrence of hindrance

   iv) Period for which hindrance, is likely to last

   v) Extension of time period applied for by the Contractor

   vi) Over lapping period, if any, giving reference to items which over lap

   vii) Net period for which extension is recommended.

   viii) Remarks as to why the hindrance occurred and justification for extension recommended.

4. Engineer-In-Charge recommendations.

   (The present progress of the work should be stated and whether the work is likely to be completed by the date upto which extension has been applied for. If extension of time is not recommended, what compensation is proposed to be levied under the agreement.

SIGNATURTE OF ENGINEER-IN-CHARGE

APPROVAL OF ZONAL HEAD

PROFORMA FOR EXTENSION OF TIME

P A R T –III

To

NAME

ADDRESS OF THE CONTRACTOR

SUBJECT:

Dear Sir(s)

Reference your letter No _____ dated _____ , in connection with the grant of extension of time for completion of the work…..

The date of completion for the above mentioned work, is …… ……. as stipulated in the agreement,
dated ……

Extension of time for completion of the above mentioned work is granted upto_____, without prejudice to the right of EPI to recover compensation for delay in accordance with the provision made in the relevant Clause (s) of the said agreement dated the ___/ ___/ ___. It is also clearly understood that EPI shall not consider any revision in contract price or any other compensation whatsoever due to grant of this extension.

Provided that notwithstanding the extension hereby granted, time is and shall still continue to be the essence of the said agreement.

Yours faithfully,

FOR EPI LTD.

FORMAT NO: EPI/MMD/F/26

PROFORMA FOR BANK GURANTEE IN LIEU OF EARNEST MONEY DEPOSIT

In consideration of Chairman & managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, Lodhi Road, New Delhi Pin-110003. (hereinafter called the EPI) having agreed to accept bank Guarantee of Rs ..... in lieu of EARNEST MONEY DEPOSIT from ..... (hereinafter called the Supplier/ Contractor/ Sub-Contractor, which expression shall include its heirs, successors and assignees) in respect of the Tender for .....

We, ... bank having its registered/head office at ..... (hereinafter referred to as the Bank) do hereby agree and undertake to pay to EPI without demur or protest an amount not exceeding Rs..... on demand by EPI.

We the above said Bank further agree and undertake to pay the said amount of Rs..... without any demur on demand within 48 hours. Any demand made on the Bank by EPI shall be conclusive as regards the amount due and payable by the Bank under this guarantee.

We the above said Bank further agree that the guarantee herein contained shall be in full force and in effect until ..... date .....

Unless a demand or claim under this guarantee is made on us in writing on or before ..... date ..... , we shall be discharged from all liabilities under this guarantee thereafter.

We, the above said Bank, further agree that EPI shall have full liberty, without our consent and without affecting in any manner our obligation to verify, modify or delete any of the conditions.

We, the above said Bank, lastly undertake not to revoke this guarantee during its currency except with the prior consent of EPI in writing.

Dated…….this day of……..200.

For and on behalf of the Bank

<u>NOTE</u>: on a Non-Judicial stamp paper of Rs. 100/- (Rupees One hundred only)

FORMAT NO. EPI/MMD/F/17

SECURITY DEPOSIT CUM PERFORMANCE BANK GUARANTEE

The Chairman &Managing Director
(A Govt. of India Enterprise),
Engineering Projects (India) Ltd.
Core-3, SCOPE Complex
7, Institutional Area, Lodhi road
New Delhi –110 003

Dear Sir,

In consideration of the Chairman & Managing Director, Engineering Projects (India) Ltd. (A Govt. of India Enterprise), Core-3, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi – 110 003 (hereinafter called 'EPI' which expression shall unless repugnant to the subject or context includes its successors and assigns) having agreed under the terms and conditions of Supply Contract/Contract/Sub-Contract no._____ _____Dated_____made between M/s _____ _____ (hereinafter referred to as the said Supplier/Contractor/Sub-Contractor) which expression shall unless repugnant to the subject or context includes its successors and assigns) and EPI in connection with _____ (hereinafter called 'The said Supply Contract/Contract/Sub-Contract) to accept a Deed Security Deposit-cum-Performance Bank Guarantee as herein provided for _____in lieu of :

a) The Security Deposit to be made by the said Supplier/Contractor/Sub-Contractor for the due fulfillment by the said Supplier/Contractor/Sub-Contractor of the terms and conditions contained in the said Supply Contract/Contract/Sub-contract, and

b) Fulfillment of the conditions of the said Supply Contract /Contract/Sub-Contract by furnishing a security for the performance of the works and/or equipment/materials supplied in accordance with conditions of the said Supply Contract/ Contract/ Sub-Contract.

1. We _____(hereinafter referred to as "the said bank which expression shall unless repugnant to the subject or context includes its successors and assigns) and having our registered office at _____ do hereby unconditionally and irrevocably undertake and agree to indemnify and keep indemnified EPI from time to time to the extent of (_____) Only against any loss, damages, costs, charges and expenses caused to or suffered by or that may be caused or suffered by EP [I by reason of any breach or breaches by the said Supplier/Contractor/Sub-Contractor of any of the terms and conditions contained in the said Supply Contract/Contract/Sub-Contract and or any amount becoming due for non-

performance and /or penalty as assessed by EPI and top unconditionally pay the amount claimed by EPI on demand and without demur and protest.

2. We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Supply Contract/Contract/Sub-Contract and till all the dues of EPI under the said Supply Contract/Contract/Sub-Contract or by virtue of any of the terms and conditions governing the said Supply Contract/ Contract/ Sub-Contract have been fully paid and its claims satisfied or discharged and till EPI certifies that the terms and conditions of the said Supply Contract/Contract/Sub-Contract have been fully and properly carried out by the said Supplier/Contractor/Sub-Contractor and accordingly discharge this guarantee subject, however, that EPI shall have no claim under this guarantee after 6 months from the date of expiry of the guarantee unless a notice of the claim under this guarantee has been served on the Bank before the expiry of the said period of 6 months.

3. EPI shall have the fullest liberty without affecting in any way the liability of the said Bank under this Guarantee or indemnity from time to time to vary any of the terms and conditions of the said Supply Contract/Contract/Sub-Contract to extend time of performance of the said Supply Contract/ Contract/ Sub-Contract or to postpone for any time and from time to time any power's exercisable by it against the said Supplier/Contractor/Sub-Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Supply Contract/ Contract/ Sub-Contract or securities available to EPI and the said Bank shall not be released from its liability under these presents by any exercise by EPI of the liberty with reference to the matters aforesaid or by reason of time being given to the said Supplier/Contractor/Sub-Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its such liability.

4. We, the said Bank, further agree that EPI shall be the sole judge of and as to whether the said Supplier/Contractor/Sub-Contractor has committed any beach or breaches of any of the terms and conditions of the said Supply Contract/Contract/ Sub-Contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by EPI on account thereof and the decision of EPI that the said Supplier/Contractor/Sub-Contractor has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges and expenses caused to or suffered by EPI from time to time shall be final and binding on the Bank.

5. This guarantee shall be a continuing guarantee and shall remain valid and irrevocable for all claims of EPI and liabilities of the said Supplier/Contractor/Sub-Contractor arising up to and until mid night of _____, subject the claim period as mentioned in para _____.

6. This guarantee shall be in addition to any other guarantee or security whatsoever that EPI may now or at any time anywise may have in relation to the said Supplier/Contractor/Sub-Contractor obligation/liabilities under and/or in connection with the said Supply Contract/Contract/Sub-Contract and EPI shall have full authority to take recourse to or enforce this guarantee in preference to any other guarantee or

security which EPI may have or obtain and there shall be no forbearance on the part of EPI IN ENFORCING OR REQUIRING ENFORCEMENT OF ANY OTHER SECURITY AND shall not have the effect of releasing the said Bank from its full liability hereunder:

7. EPI shall be at liberty without reference to the said Bank and without effecting the full liability of the said Bank hereunder to take any other security in respect of the said supplier's/Contractor's/sub-Contractor's obligations and/or liabilities under or in connection with the said Supply Contract/ Contract/ Sub-Contract.

8. This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the said Supplier/Contractor/Sub-Contractor, but shall in all respects and for all purposes be binding and operative until payment of all moneys paid to EPI in terms thereof.

9. The said Bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the said Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the said Supplier/Contractor/Sub-Contractor (whether or not pending before any arbitrator, tribunal or court) of any denial or liability by the said Supplier/ Contractor/ Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the said Bank to EPI in terms hereof. The amount stated in any notice of demand addressed by EPI to the Guarantor Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor on account of any losses or damages or costs, charges and /or expenses shall as between the said bank and EPI be conclusive evidence of the amount so liable to be paid to EPI or suffered or incurred by EPI as the case may be and payable by the said Bank to EPI in terms hereof. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand to EPI without demur and protest.

10. We, the said bank undertake not to revoke this guarantee during its currency except with the consent of EPI in writing and agree that any change in the constitution of the aid Supplier/Contractor/Sub-Contractor or the said Bank shall not discharge our liabilities hereunder.

11. It shall not be necessary for EPI to proceed against the said Supplier/Contractor/Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which EPI may have obtained or obtain from the Supplier/Contractor/Sub-Contractor shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealized.

12. Our liability under this guarantee shall be restricted to _____ and this guarantee shall remain in force until midnight of _____ unless a claim to enforce this guarantee is filed with us within six months from _____. (which is date of expiry of this guarantee), we shall be discharged from all liabilities under this guarantee thereafter.

DATED ---------- THIS day of ----------200…

FOR AND ON BEHALF OF BANK

Format No: EPI/MMD/F/15

PROFORMA FOR ADVANCE BANK GUARANTEE

To

The Chairman & Managing Director,
Engineering Projects (India) Ltd.,
(A Govt.of India Enterprise),
Core-3, Scope Complex,
7, Institutional Area,
Lodhi Road,
New Delhi—110 003.

Dear Sir,

1. In consideration of the Chairman & Managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi – 110 003 (hereinafter called 'EPI' which expression shall includes its successors and assigns) having agreed under the terms and conditions of Supply Contract/ Contract/ Sub-Contract No……dated…(hereinafter referred to as the said Supply Contract/ Contract/ Sub-Contract) made between EPI and…….hereinafter called the Supplier/ Contractor/ Sub-Contractor) which expression shall include its successors and assigns to make at the request of the Supplier/ Contractor/ Sub-Contractor a lump sum advance of Rs……..for utilising it only for the purposes of the said Supply Contract/ Contract/ Sub-Contract on his furnishing a guarantee acceptable to EPI.

2. We, the... .....Bank (hereinafter referred to as 'the said Bank) a Company under the Companies Act 1956 and having our registered office at…….....do hereby guarantee the recovery of the said advance and interest thereon as provided according to the terms and conditions of the said Supply Contract/ Contract/ Sub-Contract. If the Supplier/ Contractor/ Sub-Contractor fails to utilise the said advance for the purposes of the said Supply Contract/ Contract/ Sub-Contract and/or the said advance together with interest thereon as aforesaid is not fully recovered by EPI, we. ……Bank hereby unconditionally and irrevocably undertake to pay the EPI on demand and without demur or protest to the extent of the said sum of Rs……any claim made by EPI on us against non-utilisation / misutilisation of the said advance and/or by reason of EPI not being able to recover in full the sum of Rs…….. with interest as aforesaid.

3. We.....Bank further agree that EPI shall be the sole judge of and as to whether the said Supplier/ Contractor/ Sub-Contractor has utilised or not utilised the said advance or any part thereof for the purposes of the said Supply Contract/ Contract/ Sub-Contract and/or as to whether the advance or any part thereof with

interest has been recovered or not and the finding of the EPI in this regard- shall be final and binding on us.

4. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Supply Contract/ Contract/ Sub-Contract and till the said advance with interest has been fully recovered and its claims satisfied or discharged and till EPI certifies that the said advance with interest has been fully recovered from the Supplier/ Contractor/ Sub-Contractor.

5. EPI shall have the fullest liberty without affecting in any way the liability to the said Bank under this guarantee or indemnity from time to time to vary any of the terms and conditions of the said Supply Contract/ Contract/ Sub-Contract, or the advance or to extend time of performance by the said Supplier/ Contractor/ Sub-Contractor or to postpone for any time and from time to time any powers exercisable by it against the said Supplier/ Contractor/ Sub-Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Supply Contract/ Contract/ Sub-Contract or securities available to EPI and the said Bank shall not be released from its liability under these presents by any exercise by EPI of the liberty with reference to the matters aforesaid or by reason of time being given to the said Supplier/ Contractor/ Sub-Contractor or any other forbearance, act or omission on the part of the EPI or any indulgence by EPI to the said Supplier/ Contractor/ Sub-Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its such liability.

6. The Bank hereby waives all rights at any time inconsistent with the terms of this guarantee/Undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the Supplier/ Contractor/ Sub-Contractor (whether or not pending before any arbitrator, Tribunal or court) or any denial or liability by the Supplier/ Contractor/ Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to EPI in terms hereof.

7. The amount stated in any notice of demand addressed by EPI to Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor, shall be conclusive evidence of the amount so liable to be paid to EPI by the Bank.

8. This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that EPI may now or any time anywise may have in relation to the Supplier's/ Contractor's/ Sub-Contractor's obligations of liabilities under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract, and EPI shall have full authority to take recourse to or enforce this security in preference to any other guarantee or security which EPI may have or obtain and there shall be no forbearance on the part of EPI in enforcing or requiring enforcement of any other security and shall not have the effect of releasing the Bank from its full liability hereunder.

9. It shall not be necessary for EPI to proceed against the said Supplier/ Contractor/ Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which EPI may have obtained or obtain from the Supplier/ Contractor/ Sub-Contractor, shall at the time

when proceedings are taken against the said Bank hereunder be outstanding or unrealised.

10. We, ... the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand without demur and protest notwithstanding any dispute/difference pending between the parties before the arbitrator Tribunal or Court and/or dispute is being referred to arbitrator.

11. We, the said Bank undertake not to revoke this Guarantee during its currency except with the consent of EPI in writing and agree that any change in the Constitution of the said Supplier/ Contractor/ Sub-Contractor or the said Bank shall not discharge our liability hereunder.

12. This guarantee/undertaking shall be a continuing guarantee/undertaking and shall remain valid and irrevocable for all claims of EPI and liabilities of the Supplier/ Contractor/ Sub-Contractor arising up to and until midnight of…….

13. Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs…….. (Rs……..) and this guarantee shall remain in full force till……. unless a claim is made on us within 3 months from the date of expiry of this guarantee i.e. before all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities hereunder.

Dated.....day of.....200

For and on behalf of Bank

Format No: EPI/MMD/F-16

PROFORMA FOR PERFORMANCE BANK GUARANTEE

To

The Chairman & Managing Director,
Engineering Projects (India) Ltd.,
(A Govt. of India Enterprise),
Core-3, Scope Complex,
7, Institutional Area,
Lodhi Road,
New Delhi—110 003.

Dear Sir,

In consideration of the Chairman & Managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi – 110 003 (hereinafter called 'EPI' which expression shall include its successors and assigns) having awarded to …… (hereinafter referred to as 'the Supplier/ Contractor/ Sub-Contractor' which expression shall wherever the subject or context so permits include its successors and assigns) a Supply Contract/Contract / Sub-Contract No. …… in terms inter alia, of EPI Letter No. ….……dated…and the General Conditions of Contract/ General Purchase Conditions of EPI and upon the condition of the Supplier's/ Contractor's/ Sub-Contractor's furnishing security for the performance of the Supplier's/ Contractor's/ Sub-Contractor's obligations and/or discharge of the Supplier's/ Contractor's/ Sub-Contractor's liability under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract up to a sum of Rs……(Rupees……. only) amount to……..percent of the total Supply Contract/ Contract/ Sub-Contract Value.

1. We…….(hereinafter called 'the Bank' which expression shall include its successors and assigns) hereby jointly and severally undertake the guarantee to payment to EPI in rupees forthwith on demand in writing and without protest or demur or any and all monies anywise payable by the Supplier/ Contractor/ Sub-Contractor to EPI under in respect of or in connection with the said Supply Contract/ Contract/ Sub-Contract inclusive of all EPI's losses and damages and costs, charges and expenses and other moneys anywise payable in respect to the above as specified in any notice of demand made by the EPI to the Bank with reference to this guarantee up to and aggregate limit of Rs…… (Rupees……..only).

2. We…….. Bank further agree that EPI shall be sole judge of and as to whether the said Supplier/ Contractor/ Sub-Contractor has committed any breach or breaches of any of the terms and conditions of the said Supply Contract/ Contract/ Sub-Contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by EPI on account thereof and the decision of EPI that the said Supplier/ Contractor/ Sub-Contractor has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by EPI from time to time shall be final and binding on us.

3. EPI shall be at liberty without reference to the Bank and without effecting the full liability of the Bank hereunder to take any other security in respect of the Supplier's/ Contractor's/ Sub-Contractor's obligations and/or liabilities under or in connection with the said Supply Contract/ Contract/ Sub-Contract and to vary the forms vis-à-vis the Supplier/ Contractor/ Sub-Contractor of the said Supply Contract/ Contract/ Sub-Contract or to grant time and/or indulgence to the Supplier/ Contractor/ Sub-Contractor or to reduce or to increase or otherwise vary the prices of the total Supply Contract/ Contract/ Sub-Contract Value or to release or to forbear from enforcement of all or any of the security and/or any other security(ies) now or hereafter held by the EPI and no such dealing(s) reduction(s) increase(s) or other indulgence(s) or arrangements with the Supplier/ Contractor/ Sub-Contractor or release or forbearance whatsoever shall absolve the bank of the full liability to EPI hereunder or prejudice rights of EPI against the bank.

4. The guarantee/undertaking shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the Supplier/ Contractor/ Sub-Contractor but shall in all respects and for all purposes be binding and operative until payment of all moneys made to EPI in terms thereof.

5. The Bank hereby waives all rights at any time inconsistent with the terms of this guarantee/undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the Supplier/ Contractor/ Sub-Contractor (whether or not pending before any arbitrator, Tribunal or Court) of any denial or liability by the Supplier/ Contractor/ Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to the EPI in terms hereof.

6. The amount stated in any notice of demand addressed by EPI to Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor or as suffered or incurred by the EPI on account of any losses or damages or costs, charges and/or expenses shall be conclusive evidence of the amount so liable to be paid to EPI or suffered or incurred by EPI as the case may be and shall be payable by the Bank to EPI in terms hereof.

7. This guarantee/undertaking shall be a continuing guarantee/undertaking and shall remain valid and irrevocable for all claims of EPI and liabilities of the Supplier/ Contractor/ Sub-Contractor arising up to and until midnight of…….

8. This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that EPI may now or any time anywise may have in relation to the Supplier's/ Contractor's/ Sub-Contractor's obligations of liabilities under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract, and EPI shall have full authority to take recourse to or enforce this security in preference to any other guarantee of security which EPI may have or obtain and here shall be no forbearance on the part of EPI in enforcing or requiring enforcement of any other security and shall not have the effect of releasing the Bank from its full liability hereunder.

9. It shall not be necessary for EPI to proceed against the said Supplier/ Contractor/ Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the EPI may have obtained or obtain from the Supplier/ Contractor/ Sub-Contractor, shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealised.

10. We the said Bank undertake not to revoke this guarantee during its currency except with the consent of EPI in writing and agree that any change in the constitution of the said Supplier/ Contractor/ Sub-Contractor or the sand bank shall not discharge our liability hereunder.

11. We ……the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand without demur and protest notwithstanding any dispute/difference pending between the parties before the arbitrator Tribunal or Court and/or any dispute is being referred to arbitrator.

12. Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs…….. (Rupees……..) and this guarantee shall remain in force till…….. unless a claim is made on us within 3 months from that date, that is before all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities thereunder.

Dated ..... day of. 200

For and on behalf of Bank

PROFORMA FOR INDEMNITY BOND TO BE EXECUTED BY THE CONTRACTOR FOR SECURED ADVANCE AGAINST MATERIALS SUPPLIED FOR THE PROJECT

(On non-judicial stamp paper of appropriate value)

INDEMNITY BOND

THIS INDEMNITY BOND is made this …….. day of…… 20…….. by…… (*Contractor's Name)* a Company registered under the Companies Act, 1956/Partnership firm/Proprietary concern having its Registered Office at …….. (hereinafter called as 'Contractor' which expression shall include its successors and permitted assigns) in favour of Engineering Projects (India) Limited, a Company incorporated under the Companies Act, 1956 having its Registered Office at Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110 003 (hereinafter called "EPI" which expression shall include its successors and assigns) :

WHEREAS EPI has awarded to the Contractor a Contract for the work of……. vide its letter of Intent/Work Order No……. dated……. (hereinafter called the "Contract") in terms of which EPI is required to give "Secured Advance" to the Contractor as per Clause no. 35 of the General Conditions of Contract against supply of materials by the Contractor for the project on the security of materials, the quantities, rates and other particulars of which are detailed in the Bill of Quantities for the said Contract.

And WHEREAS by virtue of Clause no. 35 of the General Conditions of Contract of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of EPI for the amount of "Secured Advance" towards the materials actually supplied by the Contractor for the Contract Work from time to time to EPI for the purpose of performance of the Contract. (hereinafter called the "Materials").

"AND WHEREAS the Contractor has applied to EPI that they may be allowed "Secured Advance" on the security of materials absolutely belonging to them and brought by them to the site of the works for use in construction of the work".

NOW THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of the "Secured Advance" being given to the Contractor as mentioned in the Contract, for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep EPI indemnified, for the Actual Cumulative Amount of the "Secured Advance" given to the Contractor from time to time against the said Contract. The Contractor hereby acknowledges actual receipt of the materials etc. as per despatch title documents being /to be handed over to EPI from time to time. The Contractor shall hold such materials in trust as a "Trustee" for and on behalf of EPI.

2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the materials at EPI's project site against all risks whatsoever till the materials are duly used/erected in accordance with the terms of the Contract and the plant/package duly erected and commissioned in accordance with the terms of the Contract is taken over by EPI and the Secured Advance is fully adjusted/recovered as per terms of the Contract. The Contractor undertakes to keep EPI harmless against all losses, damages, deterioration and shortages that may be caused to the materials.

3. The Contractor undertakes that the materials shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the materials shall be utilized for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes including legal/penal consequences.

4. That EPI is and shall remain the exclusive owner of the materials free from all encumbrances, charges or liens of any kind, whatsoever. The materials shall at all times be open to inspection and checking by the Engineer – In - Charge or other employees/agents authorized by him in this regard. Further, EPI shall always be free at all times to take possession of the materials in whatever form the materials may be, if in its opinion, the materials are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of EPI to handover the materials without any demur or reservation.

5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the materials or the same or any part thereof is mis-utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Engineer-In-Charge of EPI as to assessment of loss or damage to the materials shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and /or damaged materials at its own cost and/or shall pay the amount of 'Secured Advance' to EPI without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to EPI against the Contractor to recover any amount or all the amounts of this Bond from any dues of the Contractor under the Contract or as per the law.

6. This Bond shall remain in force and effect till the completion of the work as per the aforesaid Contract and till all the amount recoverable under this Bond from the Contractor is fully recovered by EPI. The Bond can not be revoked by the Contractor without the written consent of EPI.

7. That Contractor also agrees that any change in the constitution of the Contractor shall not discharge them from their obligation and liability.

8. This Bond shall be treated as an additional addage to the Contract and nothing herein contained shall be construed to adversely affect the rights of EPI in the Contract.

IN WITNESS WHEREOF, the Contractor has signed this Indemnity Bond through its duly authorized representative on the date and place first above written.

For and on behalf of Contractor

(Contractor's Name)

WITNESS:

1. 1. Signature …….
   2. Name …….
   3. Address …….

2. 1. Signature …….
   2. Name …….
   3. Address ……..

Signature …….

Name (Executant) …….

Designation …….
(Authorised representative)

Seal

FORM FOR GUARANTEE BOND

FOR ANTI-TERMITE TREATMENT

THIS AGREEMENT made this____ day of Two thousand _____ between M/s_____ (hereinafter called the guarantor of the one part and M/s Engineering Projects (India) Limited, hereinafter called EPI hereinafter called the OWNER of the other part.

Whereas this agreement is supplementary to the contract hereinafter called the contract dated_____ made between the guarantor of the one part and Engineering Projects (India) Ltd., of the other part whereby the Contractor inter-alia, understood to render the buildings and structures in the said contract recited, completed, termite proof. And whereas the guarantor agreed to give a guarantee to the effect that the said structure will remain termite proof for TEN YEARS to be so reckoned from the date after the maintenance period prescribed in the contract expires.

During this period of guarantee the guarantor shall make good all defects and for that matter shall replace at his risk and cost such wooden member as may be damaged by termite and in case of any other defect being found, he shall render the building termite proof at his cost to the satisfaction of the Engineer-In-Charge and shall commence the works of such rectification within seven days from date of issuing notice from the Engineer-In-Charge calling upon him to rectify the defects falling which the work shall be got done by EPI/ OWNER by some other Contractor at the guarantor's cost and risk and in the later case the decision of the Engineer-In-Charge as to the cost recoverable from the guarantor shall be final and binding.

That if the Guarantor fails to execute the Anti-Termite treatment or commits breaches hereunder then the Guarantor will indemnify EPI against all losses damages, cost expenses or otherwise which may be incurred by him by reasons of any default on the part of the guarantor in performance and observance of this supplemental Agreement. As to the amount of loss and or damage and/or cost incurred by EPI/ OWNER, the decision of the Engineer-In-Charge will be final and binding on the parties.

In witness where of these presents have been executed by the Guarantor_____ and by_____ for and on behalf of EPI on the day of month and year first above written.

Signed sealed and delivered by (Guarantor)

IN THE PRESENCE OF:
1.

2.

Signed for and on behalf of EPI by/ in presence of:

1.

2.

GUARANTEE TO BE EXECUTED BY CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

The agreement made this …….. day of …….. Two thousand …….…….. between …… (hereinafter called Guarantor of the one part) and EPI (hereinafter called the Execution Agency of the other part).

WHEREAS this agreement is supplementary to a contract (hereinafter called the Contract), dated …… and made between the GUARANTOR OF THE ONE part and EPI of the other part, whereby the Contractor, inter-alia, undertook to render the buildings and structures in the said contract recited completely water and leak proof.

AND WHEREAS the Guarantor agreed to give a guarantee to the effect that the said structures will remain water and leak proof for ten years from the date of handing over of the structure of water proofing treatment.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be ten years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the Guarantor will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose.

a) Misuse of roof shall mean any operation, which will damage proofing treatment, like chopping of firewood and things of the same nature, which might cause damage to the roof.

b) Alternation shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts

c) The decision of the Engineer-In-Charge with regard to cause of leakage shall be final

During this period of guarantee, the Guarantor shall make good all defects and in case of any defect being found render the building water proof to the satisfaction of the Engineer-In-Charge at his cost and shall commence the work for such rectification within seven days from the date of issue of notice from the Engineer-In-Charge calling upon him to rectify the defects failing which the work shall be got done by EPI by some other Contractor at the **guarantor's** cost and risk. The decision of Engineer-In-Charge as to the cost, payable by the Guarantor shall be final and binding.

That if the Guarantor fails to execute the waterproofing or commits breach thereunder, then the Guarantor will indemnify the principal and his successors against all laws

damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and/ or cost incurred by EPI, the decision of the Engineer-In-Charge will final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obligator,,,,….. and by ……. And for and on behalf of EPI on the day, month and year first above written.

Signed, sealed and delivered by Obligator in the presence of-

1.

2.

Signed for and on behalf of EPI by _____

In presence of :

1.

2.

AGREEMENT FORM

This agreement made this day of (Month) (Year), between THE **ENGINEERING PROJECTS (INDIA) LIMITED (EPI),** (A Govt. of India enterprise) a company incorporated under the Companies Act, 1956 having its Registered and Corporate Office at Core-3, Scope Complex, 7, Institutional area, Lodhi Road, New Delhi – 110003 (hereinafter referred to as the "EPI" which expression shall include its administrators, successors, executors and assigns) of the one part and **M/s (NAME OF CONTRACTOR)** (hereinafter referred to as the 'Contractor' which expression shall unless the context requires otherwise include its administrators, successors, executors and permitted assigns) of the other part.

WHEREAS, EPI, is desirous of construction of **(NAME OF WORK)** (hereinafter referred to as the "PROJECT") on behalf of the **(NAME OF OWNER/MINISTRY)** (hereinafter referred to as "OWNER"), and had invited Tenders as per Tender Documents vide NIT No. _____.

AND WHEREAS **(NAME OF CONTRACTOR)** had participated in the above referred Tender vide their tender dated _____ and EPI has accepted their aforesaid Tender and award the contract for (**NAME OF PROJECT**) on the terms and conditions contained in its Letter of Intent No. _____ and the documents referred to therein, which have been unequivocally and unconditionally accepted by **(NAME OF CONTRACTOR)** vide their Letter of Undertaking dated _____ resulting into a contract.

NOW THEREFORE THIS DEED WITNESSETH AS UNDER:

ARTICLE 1.0 – AWARD OF CONTRACT

1.1 SCOPE OF WORK

EPI has awarded the contract to **(NAME OF CONTRACTOR)** for the work of **(NAME OF WORK)** on the terms and conditions in its Letter of intent No. _____ dated _____ and the documents referred to therein. The award of work has taken effect from **(DATE)** i.e. the date of issue of aforesaid letter of intent. The terms and expressions used in this agreement shall have the same meanings as are assigned to them in the "Contract Documents" referred to in the succeeding Article.

ARTICLE 2.0 – CONTRACT DOCUMENTS

2.1 The contract shall be performed strictly as per the terms and conditions stipulated herein and in the following documents attached herewith (hereinafter referred to as "Contract Documents").

a) EPI Notice Inviting Tender vide No. _____ date _____and EPI's Tender Documents consisting of:

i) Instructions to Tenderers and General Conditions of Contract (GCC) alongwith amendments/errata to GCC (if any) issued (Volume-I).

ii) Additional Conditions of Contract including Appendices & Annexures, Volume-II.
iii) Bill of Quantities alongwith amendments/corrigendum of schedule items, if any (Volume-III).
iv) Technical Specifications
v) Drawings
vi) _____

b) **(NAME OF CONTRACTOR)** letter/proposal no._____ dated _____ and their subsequent communication:

i) Letter of Undertaking of Tender Conditions dated _____
ii) _____
iii) _____

2.2 EPI's detailed Letter of Intent No. _____ dated ____ including Bill of Quantities. Agreed time schedule, Contractor's Organisation Chart and list of Plant and Equipments submitted by Contractor.

2.3 All the aforesaid contract documents referred to in Para 2.1 and 2.2 above shall form an integral part of this Agreement, in so far as the same or any part thereof conform, to the Tender Documents and what has been specifically agreed to by EPI in its Letter of Intent. Any matter inconsistent therewith, contrary or repugnant thereto or deviations taken by the Contractor in its "TENDER" but not agreed to specifically by EPI in its Letter of Intent, shall be deemed to have been withdrawn by the Contractor without any cost implication to EPI. For the sake of brevity, this Agreement alongwith its aforesaid contract documents and Letter of Intent shall be referred to as the "Contract".

ARTICLE 3.0 – CONDITIONS & CONVENANTS

3.1 The scope of Contract, Consideration, Terms of Payments, Advance, Retention Moneys, Taxes wherever applicable, Insurance, Agreed Time Schedule, Compensation for delay and all other terms and conditions contained in EPI's Letter of Intent No. _____ dated _____ are to be read in conjunction with other aforesaid Contract Documents. The contract shall be duly performed by the Contractor strictly and faithfully in accordance with the terms of this contract.

3.2 The scope of work shall also include all such items which are not specifically mentioned in the Contract Documents but which are reasonably implied for the satisfactory completion of the entire scope of work envisaged under this contract unless otherwise specifically excluded from the scope of work in the Letter of Intent.

3.3 Contractor shall adhere to all requirements stipulated in the Contract documents.

3.4 Time is the essence of the Contract and it shall be strictly adhered to. The progress of work shall conform to agreed works schedule/contract documents and Letter of Intent.

3.5 This agreement constitutes full and complete understanding between the parties and terms of the presents. It shall supersede all prior correspondence to the extent of inconsistency or repugnancy to the terms and conditions contained in

Agreement. Any modification of the Agreement shall be effected only by a written instrument signed by the authorized representative of both the parties.

3.6 The total contract price for the entire scope of this contract as detailed in Letter of Intent is Rs. _____ (Rupees _____ only), which shall be governed by the stipulations of the contract documents.

ARTICLE 4.0 – NO WAIVER OF RIGHTS

4.1 Neither the inspection by EPI or the Engineer-In-Charge or Owner or any of their officials, employees or agents nor order by EPI or the Engineer-In-Charge for payment of money or any payment for or acceptance of, the whole or any part of the work by EPI or the Engineer-In-Charge nor any extension of time nor any possession taken by the Engineer-In-Charge shall operate as waiver of any provisions of the contract, or of any power herein reserved to EPI, or any right to damage herein provided, nor shall any waiver of any breach in the contract be held to be a waiver of any other or subsequent breach.

ARTICLE 5.0 – GOVERNING LAWS AND JURISDICTION

5.1 The Laws applicable to this contract shall be the laws in force in India and as amended from time to time.

Jurisdiction shall be of the Court (s) stated in the 'Memorandum' to the 'Form of Tender" only.

5.2 Notice of Default

Notice of default given by either party to the other party under the Agreement shall be in writing and shall be deemed to have been duly and properly served upon the parties hereto, if delivered against acknowledgment due or by FAX or by registered mail duly addressed to the signatories at the address mentioned herein above.

IN WITNESS WHEREOF, the parties through their duly authorized representatives have executed these presents (execution whereof has been approved by the Competent Authorities of both the parties) on the day, month and year first above mentioned at New Delhi.

For and on behalf of:	For and on behalf of:
(NAME OF CONTRACTOR)	M/s. Engineering Projects (I) Ltd.
WITNESS:	WITNESS:
1.	1.
2.	2.

ENGINEERING PROJECTS (INDIA) LIMITED
(A Govt. of India Enterprise)

QUALITY CONTROL FORMATS AND CHECKLISTS

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR CONCRETING
	REF DRAWING No._____
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____

LAYOUT	Alignment Checked	☐ Level of base Checked	☐ Dimensional Check (edges & diagonals)	☐ Starers	☐ Location of cutouts & services
STAGING / SCAFFOLDING	Adequacy & rigidity of Props, stays, bracings, conformity to scheme drgs.	☐	☐		
FORMWORK	Qty. of forms and support Props adequate	☐ Vertical form surface in alignment & plumb	☐ Even Surface Oil sprayed	☐ Gaps btwn shuttering are properly closed	☐ No space for sagging of Form work
REINFORCEMENT	Cutting & bending as per Bar bending schedule (Schedules attached)	☐ Adequate laps welds	☐ Chair / cover blocks Placed as per scheme	☐ Binding wire not Touching suttering	☐ Fixtures, inserts Cunduits in position
	Dowels & positioning Provided as per drg.	☐ Walkway for Labour provided		CLEARANCE from Elect. In-charge	
PRE-CONCRETING	Concreting Arrangements	☐ Approval of Construction joint	☐ Mixer / vibrator Condition & mixing	☐ Top level of Concrete marked	☐ Transporting & Placing arrangement
POST-CONCRETING	Compaction Checked	☐ Removal of Laitance	☐ Post Concreting Level/Dimensions	☐ No. of Cubes Cast	
DESHUTTERING & CLEARING	Curing days..... Water / compound	☐ Surface finish Ok	☐ Concrete Test Results Ok		

						W.O. ITEM	UNIT	QTY.
SIGNATURE								
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE		CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR MASONRY WORK	
	REF DRAWING No._____	
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____	

LAYOUT	Alignment & wall Thickness Checked	☐ Brick on edge (top course)		
SCAFFOLDING	Adequacy of props, Stays, platform	☐ Rigidity of base	☐ Movement Space	☐ Approach to height
PRE-LAYING	Working arrangements & service provisions checked	☐ Bricks as per specification	☐ Mortar grade & mix As specified	☐ Bricks moistened
LAYING	Joint thickness & course Ht. As specified	☐ Joint alignment Checked	☐ Vertical joints Properly mortar filled from top	
	Raking of jonts Done (if applicable)	☐ Bearing plaster for Concrete		
CURING AND CLEARING	Proper curing of const. Joint	☐ Scaffloding removed (if required)		

						W.O. ITEM	UNIT	QTY.
SIGNATURE								
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE		CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR PLASTERING WORK REF DRAWING No._____	
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____	

SCAFFLODING	Platform	☐ Stability	☐ Movement space	☐ Approach to Height	
SERVICE	All chasing work Complete	☐ Fixing in position Using clamps etc.	☐ Patching Work complete	☐ All door / window frames Fixed in position	☐ Skirting to floors marked
				CLEARANCE from Elect. In-charge	
SURFACE PREPARATION	Clearing & raking of surface	☐ Roughening Hacking done	☐ Fixing metal / lathe Chicken mesh	☐ Mortar level Guides made	☐ Surface moistened Cement slurry
PIASTERING	Mix & W/P compound Checked as per specification	☐ Coating / thickness As specified	☐ Groove at Joints Provided	☐ Corners & edges sharp & at right Angles lines & levels maintained	☐ Surface leveled with At straight edge
FINISHING	Texture	☐ Curing Days.....	☐ Site cleared	☐	☐

W.O. ITEM	UNIT	QTY.

SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR LAYING OF EXTERNAL SEWER	
	REF DRAWING No._____	
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____	

EXCAVATION	Layout	☐	Slope / cutting as per Specifications	☐	Level
LAYING/RCC	Bed concrete as per Specifications	☐	RCC pipes as per Requirement	☐	Jointing of Pipes
	Boxing	☐	Strata bore Dewatering (wherever required)		
Manholes	Bricks as per specifications	☐	Mortar as per specifications	☐	Plastering
	End of pipes plugged				
Back fillings	In layers				

W.O. ITEM	UNIT	QTY.

SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR GRIT WASH REF DRAWING No._____	
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____	

SCAFFLODING	Platform	☐ Stability	☐ Movement space	☐ Approach to Height
SERVICE PROVISIONS		☐ All chasing work Complete	☐ All door / window frames Fixed in position	
SURFACE PREPARATION	Roughening / hacking of surface done	☐ Fixing metal / lathe Chicken mesh	☐ Mortar level Guides made	☐ Surface moistened/ Cement slurry
BASE PLASTER	Mix & W/P compound Checked against specs	☐ Coating / thickness As specified	☐ Corners & edges sharp & at right Angles lines & levels maintained	
TOP LAYER	Fixing of beading for grooves as per drawing	☐ Lines and levels of grooves maintained	☐ Mix as per specificaiton	
	Washing of top layer	☐ Washing with Acid (light)	☐ Curing day	☐ Texture of final surface

W.O. ITEM	UNIT	QTY.

SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT CONTRACT No.		CHECK LIST FOR WASTE/SOIL/VENT PIPES ETC. REF DRAWING No._____ LOCATION BLOCK _____FLOOR_____AREA_____			
MATERIAL	Make as specified	☐ Thickness / class as Specified	☐ Length & dia as specified	☐ No cracks or holes visible	
LAYOUT	Space distribution & Alignment as specf.	☐ Plumb of vertical line checked			
FIXING PIPE & FITTINGS	Qty available for pipes fittings & jointing material as per size & fixing	☐ Cutting & jointing as Specified	☐ Fixing of fittings & specials as specified	☐ Connection with corr. internal networks	☐ Temporary Plugging
SMOKE TEST	Open ends plugged	☐ Injection of smoke Pressure	☐ No leakage of Smoke	☐ Section is Ok	

W.O. ITEM	UNIT	QTY.

SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR MOSAIC FLOORING
	REF DRAWING No._____
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____

LAYOUT	Sub base Preparec	☐ Provision of Services checkec	☐ Panelling (max size Separator strips	☐ Level of Sub base checkec
	Slope Provision checked			
BASE LAYER	Mix As specified	☐ Water / cement Slurry applied	☐ Cement concrete Thickness checked	☐ Ramming / leveling Compaction done
	Evenness Checked	☐ Joints treatment If any, provided		
TOP LAYER	Mix As specified	☐ Proper leveling Done	☐ Trowelling finish proper	☐ Curing done
FINISHING	Grinding	☐ Final grinding	☐ Repair applied at grinding stages	☐ Polishing

W.O. ITEM	UNIT	QTY.

SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT	CHECK LIST FOR GLAZED TILE FLOORING REF DRAWING No._____	
CONTRACT No.	LOCATION BLOCK _____FLOOR_____AREA_____	

LAYOUT	Service provisions Sanitary, electrica	☐ Fixing pattern	☐ Level of base & dado Height marked	☐ Finish level Guide	☐ Door & window frames in positior
BASE	Mix	☐ Thickness Layers	☐ Watering / Cement slurry	☐ Evenness	☐ Verticality, corners At right angle
LAYING	Moistening of tiles	☐ Plan position of cut pieces at corner	☐ Cut to size Smooth edge	☐ Chamfering of edges & edge matching propei	☐ Raking / jointing
	Cement slurry adhesive	☐ Level & plumb checked	☐ No hollow sound on tapping		
FINISHING	Grounting of joints	☐ Curing of joints			

W.O. ITEM	UNIT	QTY.

SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

NAME OF PROJECT _____

CONTRACT CONTRACT No.		CHECK LIST FOR WATER BOUND MACADAM LOCATION _____	

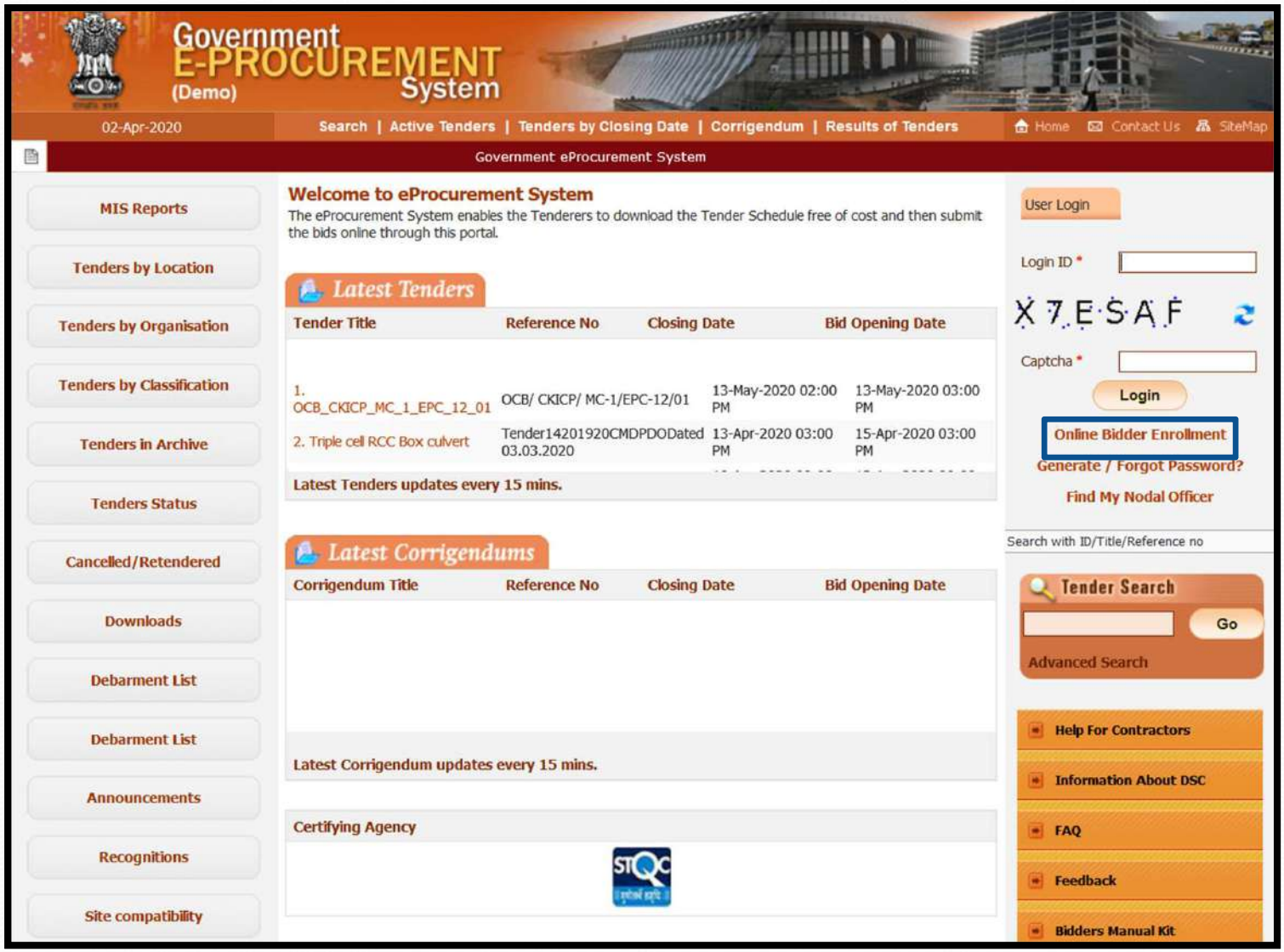
MATERIAL AGGREGATE	Gradation as specified	☐ Crushing strength as specified	☐ No of layers ☐ Thickness of layers starting from subgrade
SCREENINGS	Gradation as specified	☐ Crushing strength ☐ As specified	☐ watting & rolling as specified
MOORUM	Gradation as specified	☐ Silt content as specified	☐ Fill material
LAYOUT	Alignment of central line as per drawings and reference points	☐ Marking of Carriage way edges as per drawings	☐ Cross section levels of predecent Layer recorded
WATER BOUND MACADAM	Templates placed of specified thickness	☐ Placing, leveling of stone aggregate	☐ Stone Screeing spread as specified
	Dry rolling as specified Top cross section lands layer recorded	☐ Application of moorum as specified	☐ Wet rolling / compaction as specified

W.O. ITEM	UNIT	QTY.

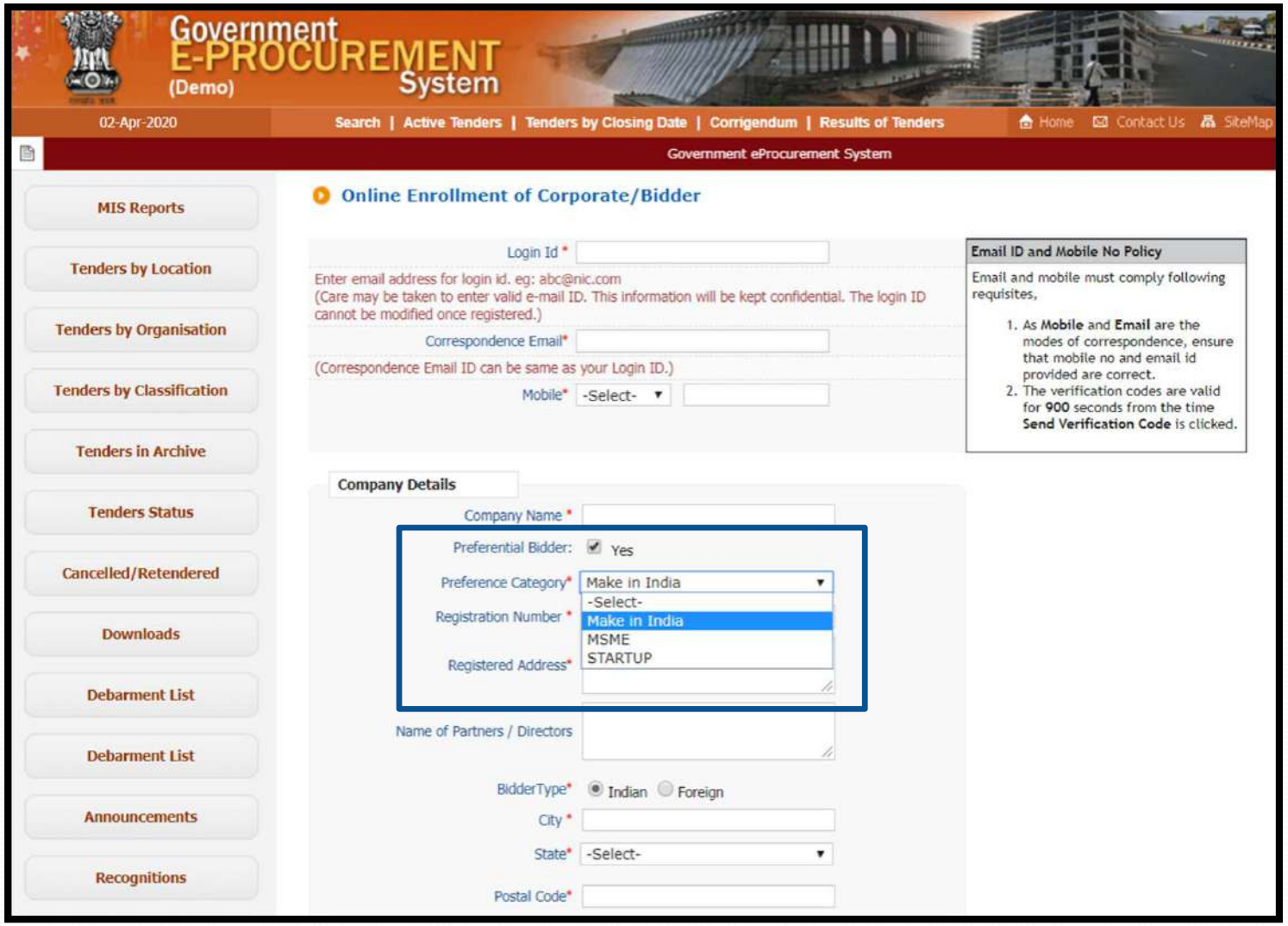
SIGNATURE							
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

Bidder Registration Module

To enroll as a bidder click on the Online Bidder Enrollment link.



The system leads to the page where the details of the bidders are to be filled in. There are preferential categories for the preferential bidders who can avail the privileges that are provided. The Preferential categories are Make in India, MSME and STARTUP. The bidders first has to click on the check box of Preferential Bidder to select the Preferential Category.



The details of the bidder are entered in the Online Enrollment of Corporate/Bidder page. The Correspondence Email id and the Mobile Number should be a valid email id and a valid mobile number because further contacts will be only through this mobile number and correspondence email id.

Online Enrollment of Corporate/Bidder

Login Id * biddertest2@gmail.com

Enter email address for login id. eg: abc@nic.com
(Care may be taken to enter valid e-mail ID. This information will be kept confidential. The login ID cannot be modified once registered.)

Correspondence Email* biddertest2@gmail.com

(Correspondence Email ID can be same as your Login ID.)

Mobile* IND (91) 99[redacted]8

Email ID and Mobile No Policy

Email and mobile must comply following requisites,

1. As **Mobile** and **Email** are the modes of correspondence, ensure that mobile no and email id provided are correct.
2. The verification codes are valid for **900** seconds from the time **Send Verification Code** is clicked.

Company Details

Company Name * Sai Private Limitted.

Preferential Bidder: ☑ Yes

Preference Category* Make in India

Registration Number * A123456Z

Registered Address* Chennai

Name of Partners / Directors

BidderType* ◉ Indian ○ Foreign

City * Chennai

State* Tamil Nadu

Postal Code* 123456

PAN/TAN Number * AESTG2458A

PAN/TAN number must have 10 characters. For eg: AESTG2458A

Page

1

Once after filling the details, the bidder enters the Captcha and clicks on the Submit Button to submit the provided details.

For Bidders who do not have PAN/TAN number may enter TEMPZ9999Z as the PAN/TAN number.

Establishment Year: 2010

Nature of Business*: Nature of Business

Legal Status*: Limited Company

Company Category *: Regd. with District Industries Cen

Contact Details

Enter Company's Contact Person Details

Title *: Mr

Contact Name*: Praveen Rawat

Date Of Birth (DD/MM/YYYY)*: 12/09/1989

Designation: CEO

Phone Details eg: +91 044 22272449

Phone*: IND (91) 044 2[redacted]

Enter Captcha: 8NJS8V

8 N J S 8 V

Refresh

Back Submit

Page 2

The Bidder enrollment Acknowledgement is displayed on the screen. The bidder Clicks on the Send Verification Code button to receive the verification code in the provided mobile number and the correspondence email id.

Bidder Enrollment Acknowledgement

Print

Login ID :	biddertest2@gmail.com
User Type :	Corporate Tenderer
Correspondence Email :	biddertest2@gmail.com
Mobile :	91-9[redacted]8

Company Details

Company Name :	Sai Private Limitted.
Preferential Bidder :	Yes
Preference Category :	Make in India
Registration Number :	A123456Z
Registered Address :	Chennai
Name of Partners / Directors :	Nil
City :	Chennai
State :	Tamil Nadu
Postal Code :	123456
PAN/TAN Number :	AESTG2458A
Company's Establishment Year :	2010
Company's Nature of Business :	Nature of Business
Company's Legal Status :	Limited Company
Company Category :	Regd. with District Industries Centre(DIC)

Contact Details

Title :	Mr
Contact Name :	Praveen Rawat
DOB (Date Of Birth) :	12-Sep-1989
Designation :	CEO
Phone :	91 044 2[redacted]9

Note: The verification codes are valid for **900** seconds from the time Send Verification code is clicked

Send Verification Code

The bidder enters the Mobile Verification Code, Mail Verification Code, enters the New Password, confirms the same, enters the Captcha and clicks on the Submit button to submit the entered details.

Generate password

Generate password

Generate password for the login id **biddertest2@gmail.com**

Provide the verification code received through Correspondence Email/ Registered Mobile Number.

Mobile Verification Code * ••••••

Mail Verification Code * ••••••

New Password * •••••••••

Confirm Password * •••••••••

Enter Captcha AAUDXC

A A U D X C

Refresh

New User who have not received Verification code, please click on 'Update Email ID/Mobile No' button provided in 'Generate/Forgot Password' link in the home page and ensure the provided email id and mobile no are correct.

Cancel Submit

Email ID and Mobile No Policy

Verification code must comply following requisites,

1. Provide verification code sent to mobile in Mobile Verification code.
2. Provide verification code sent to email in Mail Verification code.

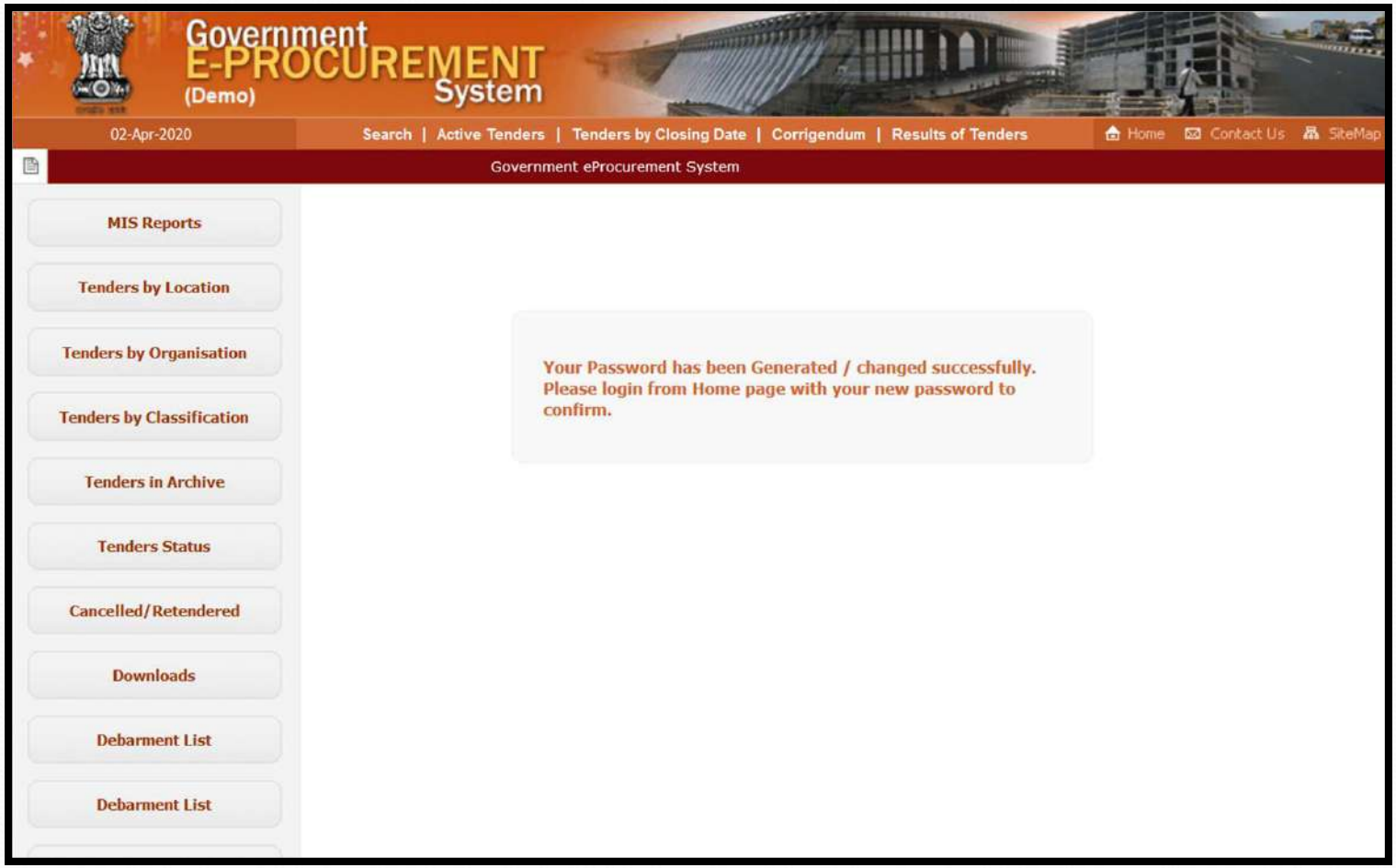
Password Policy

Your password must comply following requisites,

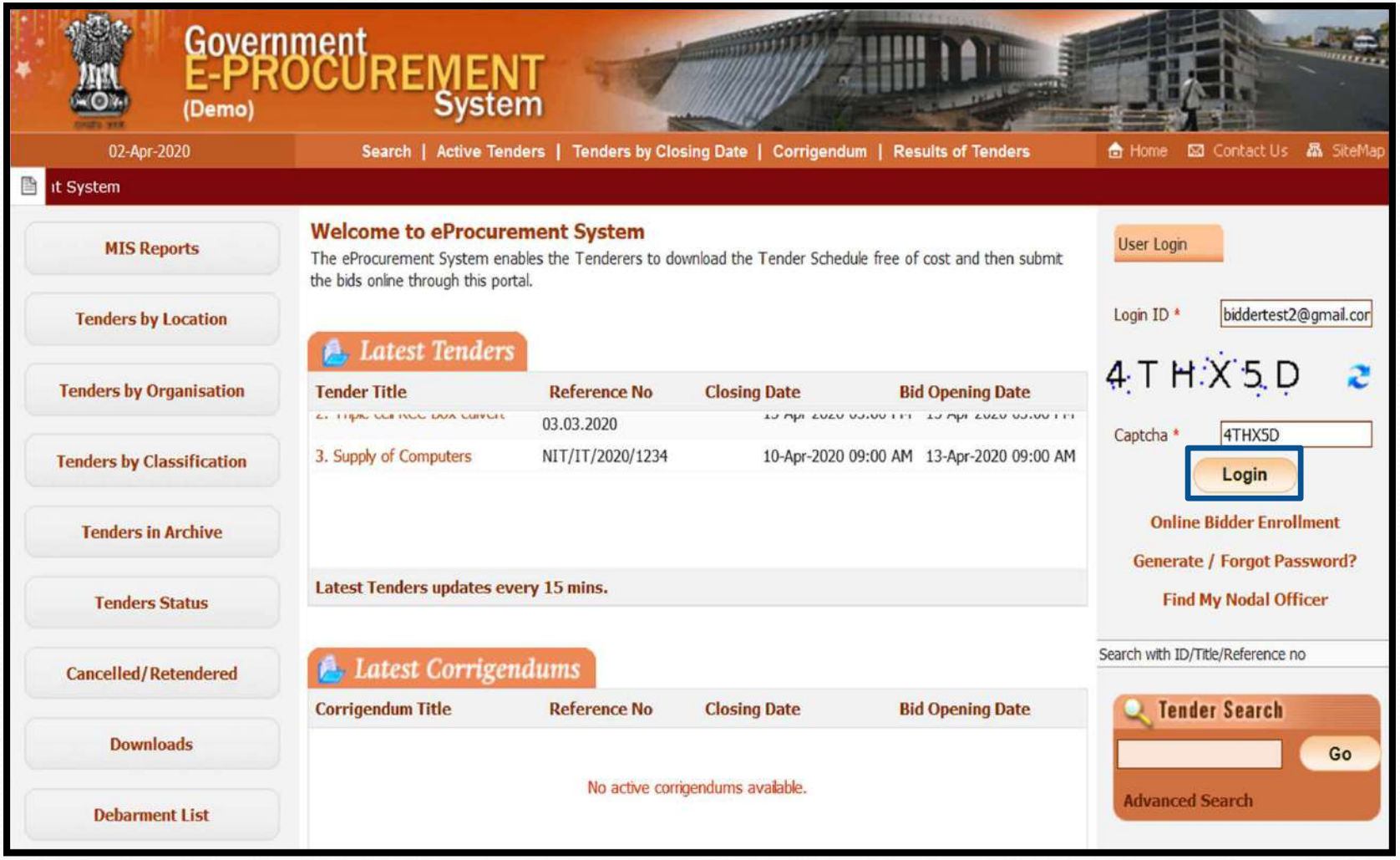
1. Length must be within ***8 to 32*** characters
2. Any ***English lowercase and uppercase (a-z and A-Z)*** characters
3. Any numbers between 0-9
4. Any special characters from the bracket **[! @ # $ ^ * _ ~]**

Good eg: Cric$2009
Bad eg: cric2009

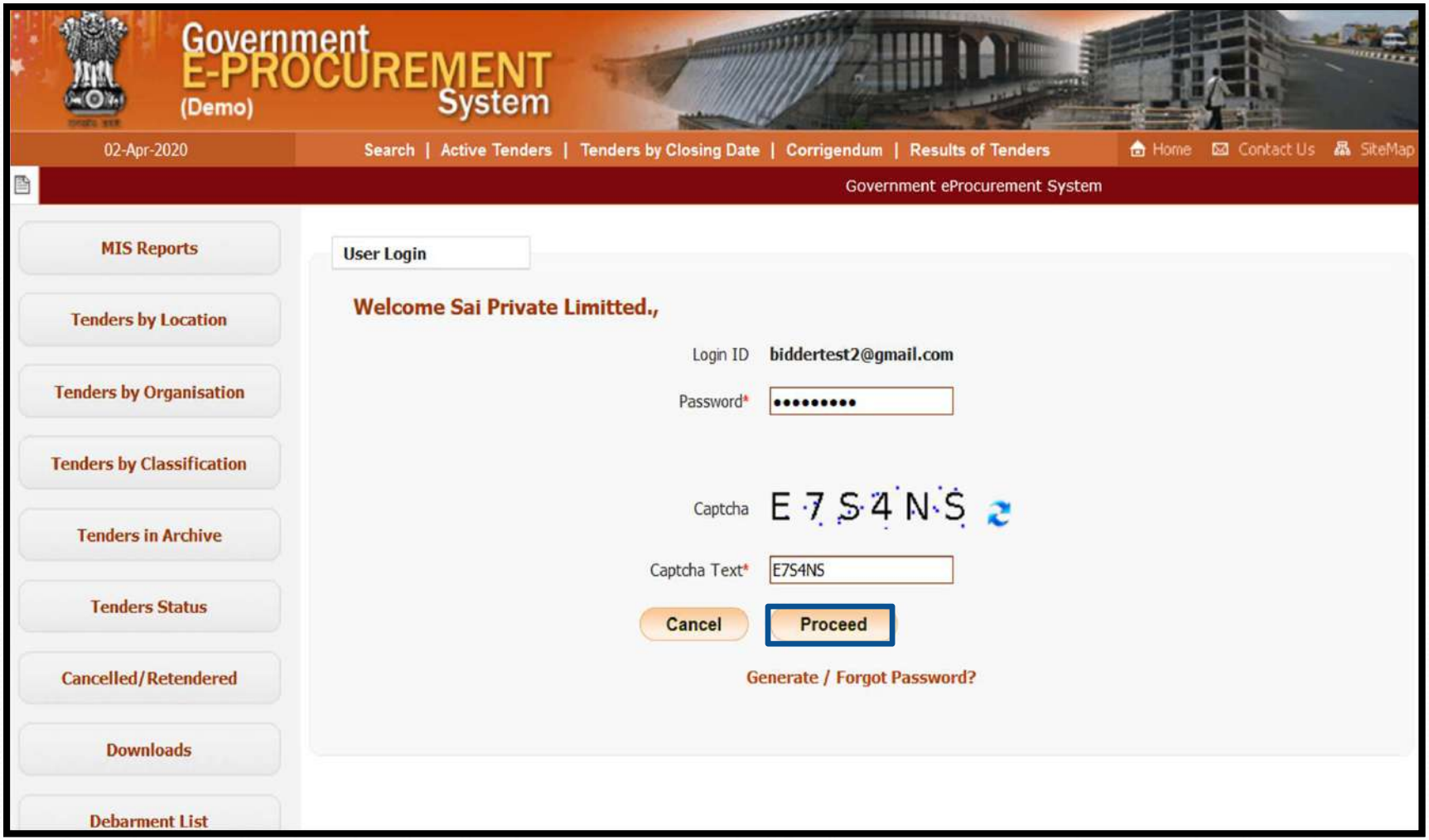
The success message is displayed on the screen.



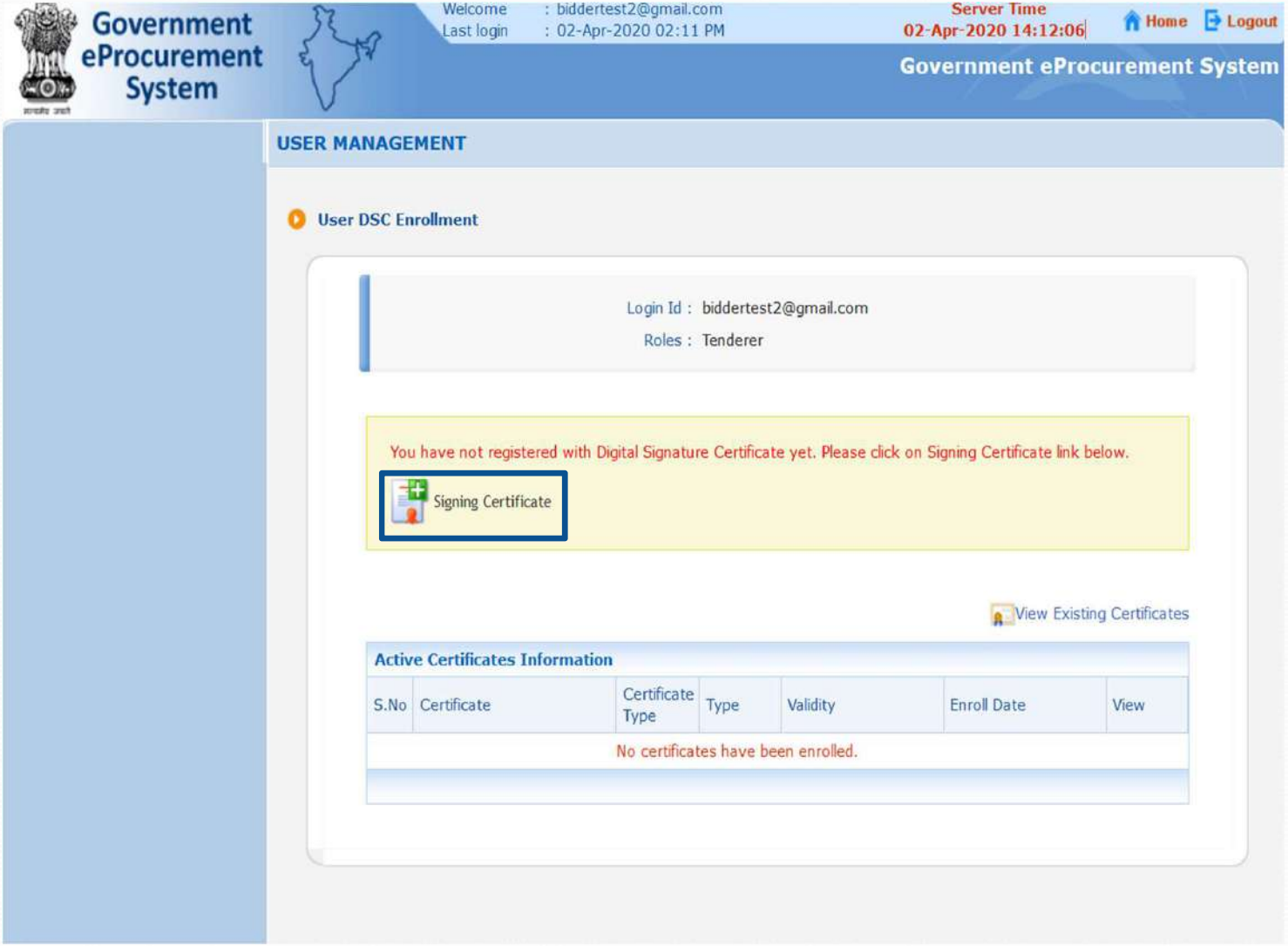
The bidder enters the Login Id, Captcha and clicks on the Login button to login to the portal.



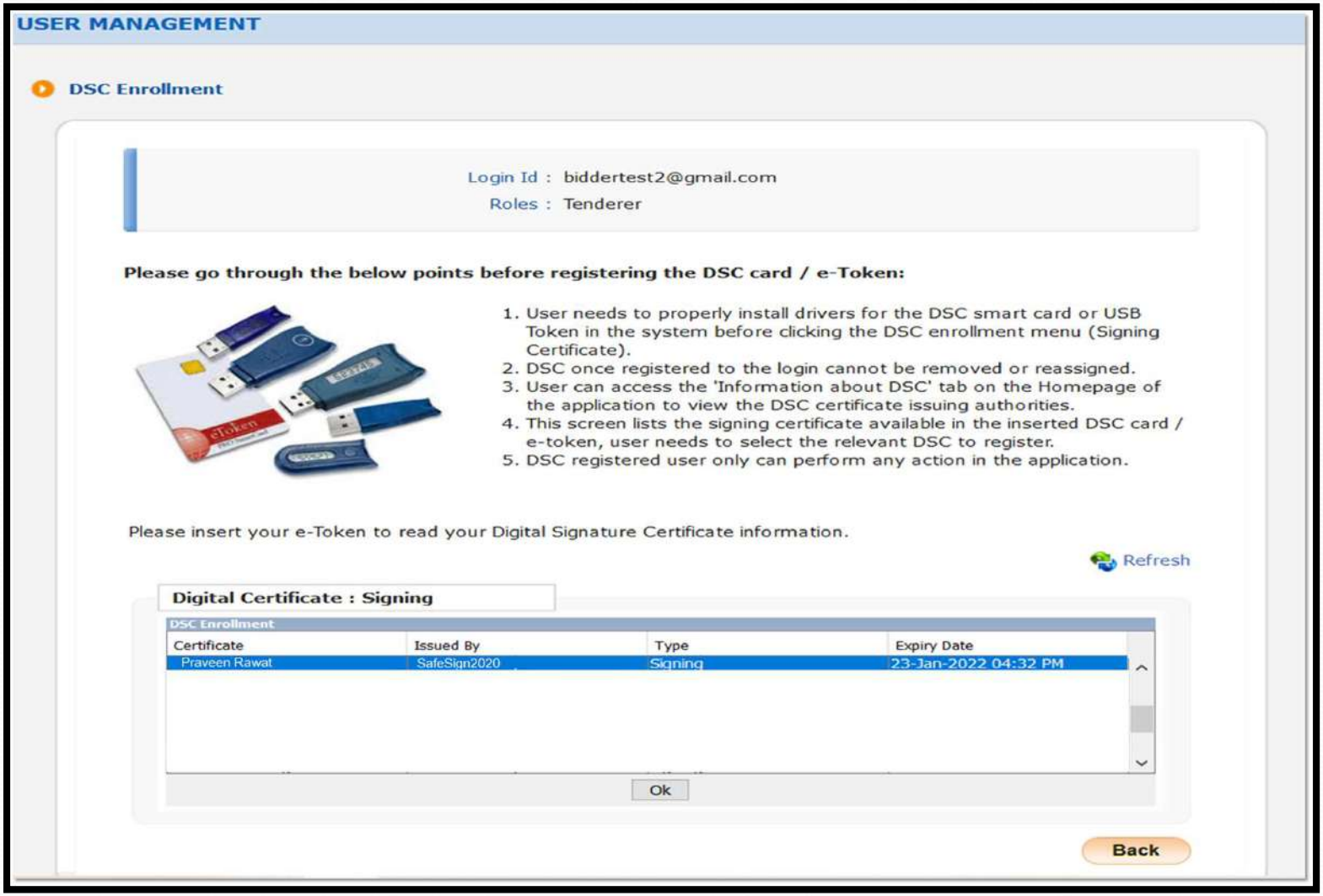
The bidder enters the password, captcha and clicks on the Proceed button to proceed further.



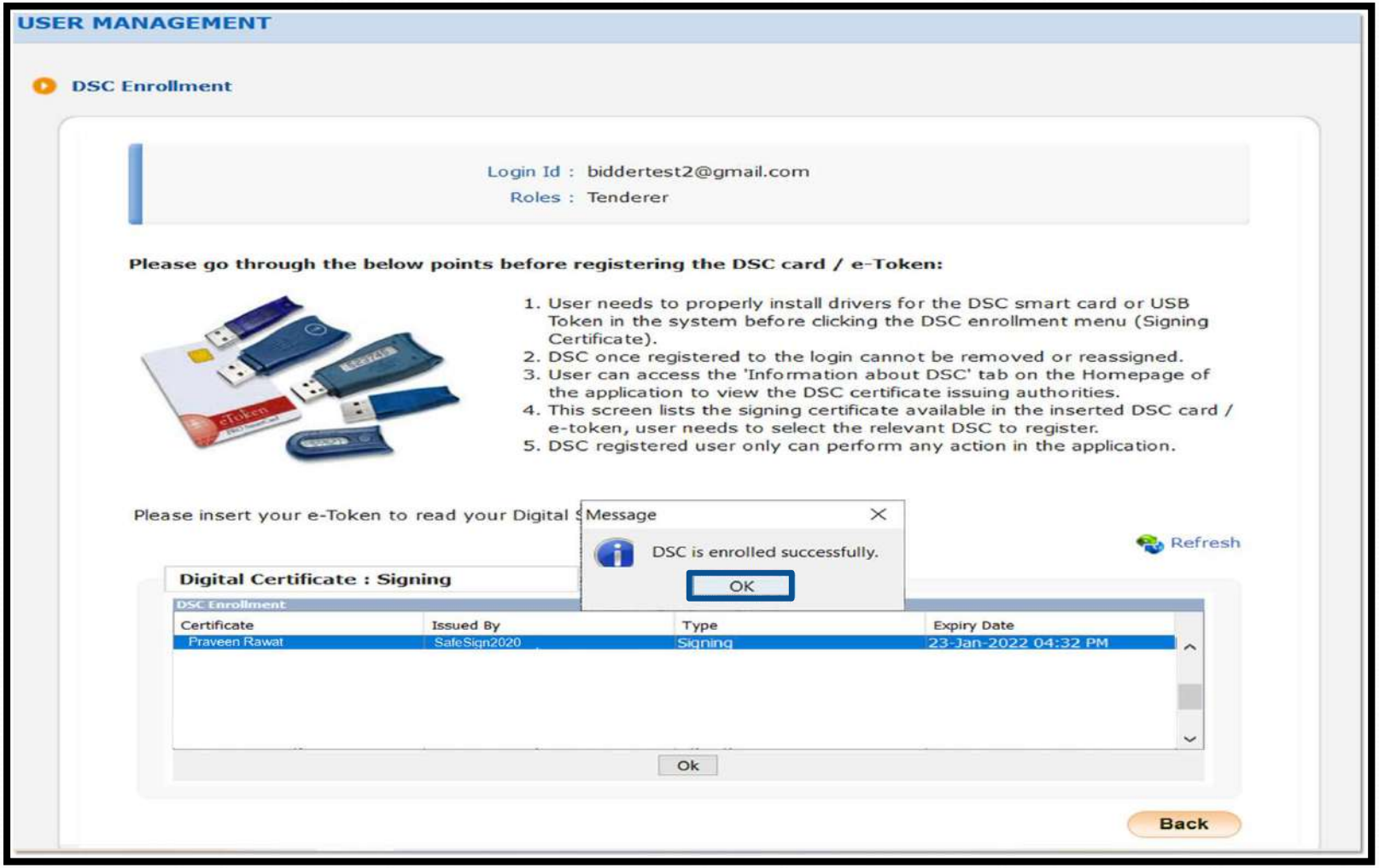
The Bidder registers the DSC by clicking on the Signing Certificate icon to register the signing certificate.



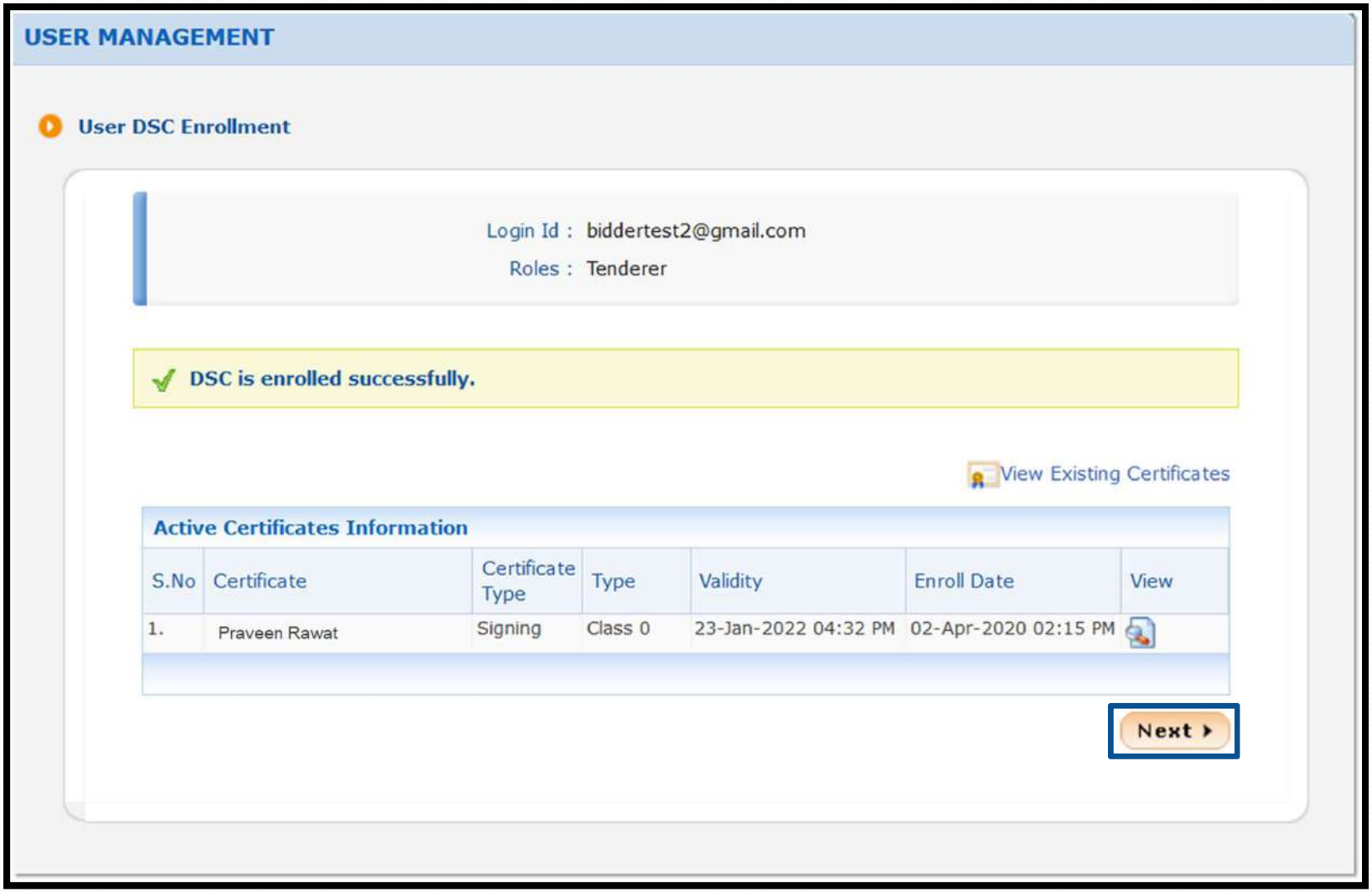
The Bidder selects the Signing certificate and clicks on the OK button to map the signing certificate.



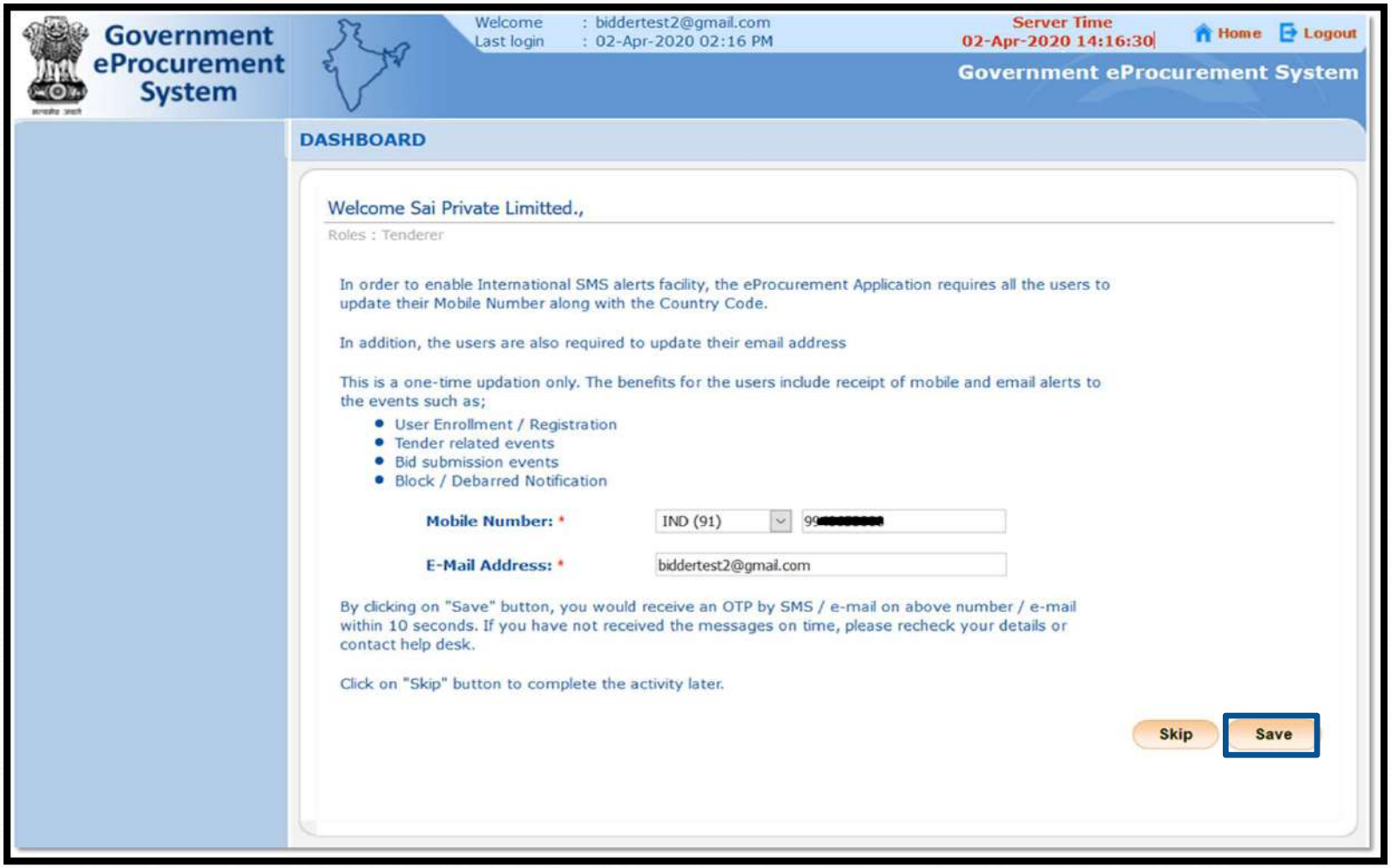
The success message is displayed on the screen.



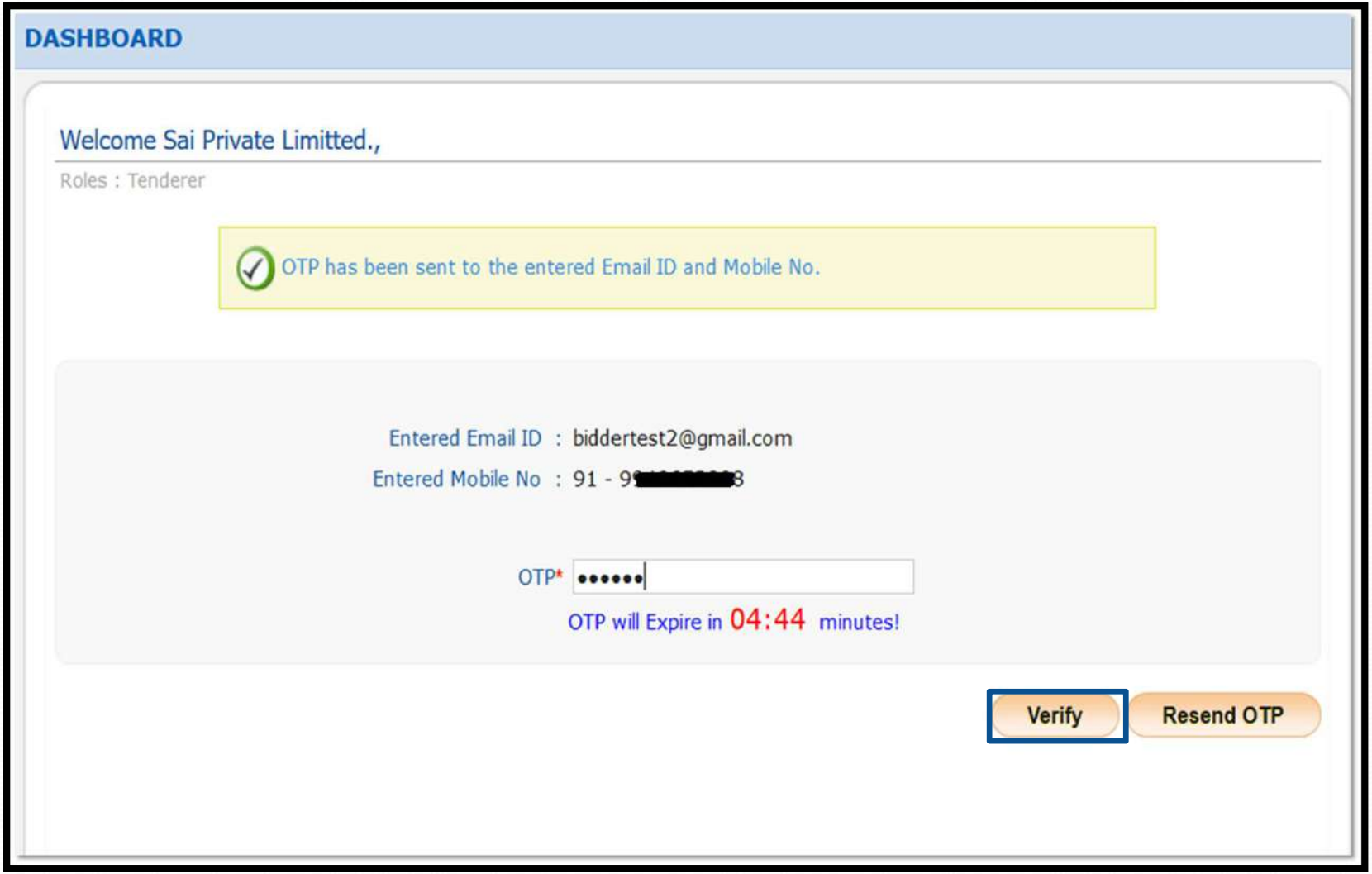
The successful enrollment of DSC is displayed on the screen. The Bidder clicks on the Next button to proceed further.



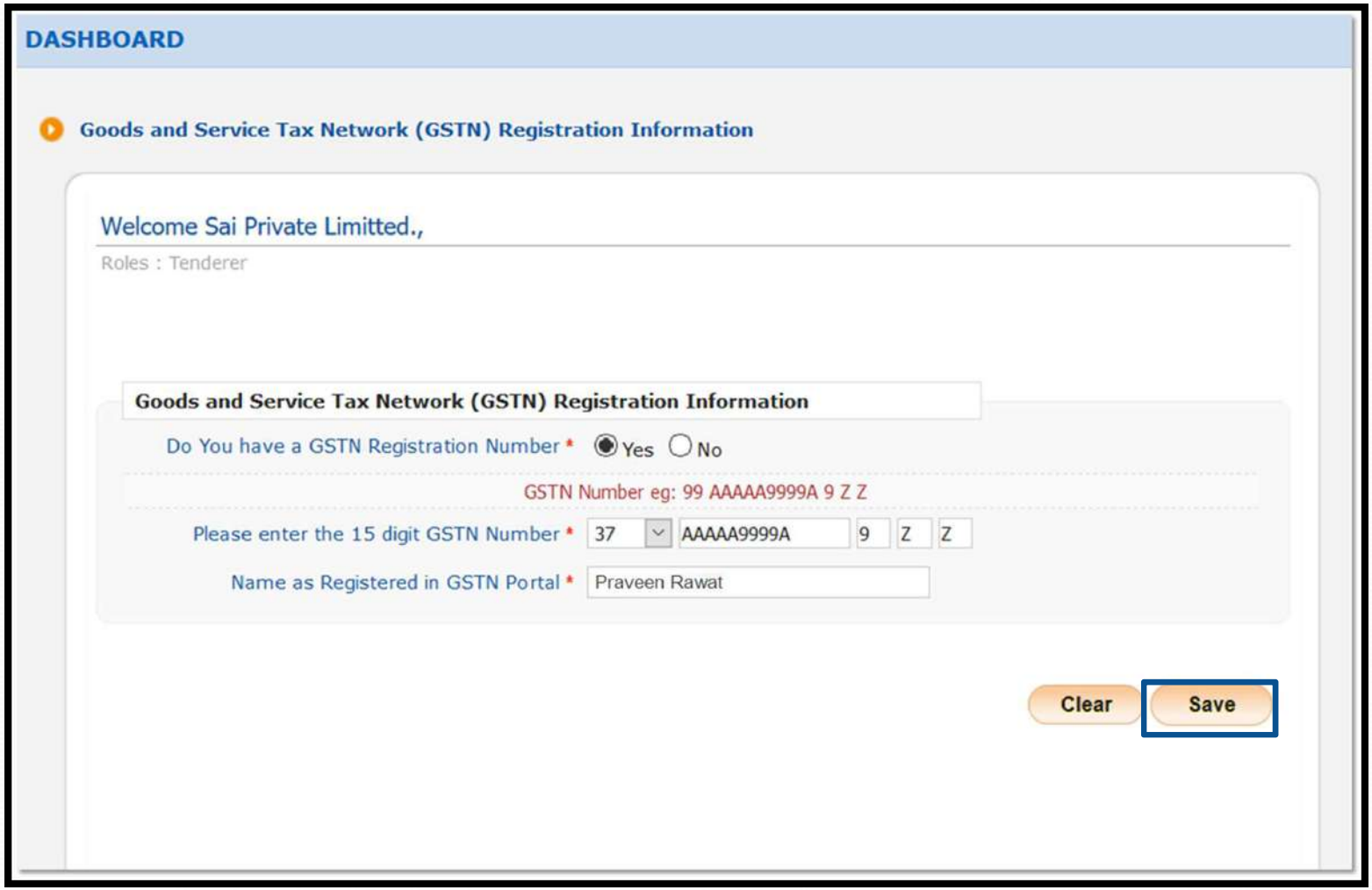
The Dash Board of the Bidder is loaded where the Bidder can change the Mobile Number, E-Mail Address and clicks on the Save button to save the provided details. If the Bidder does not want to change the Mobile Number, E-Mail Address he/she can just click on the Skip button to proceed further.



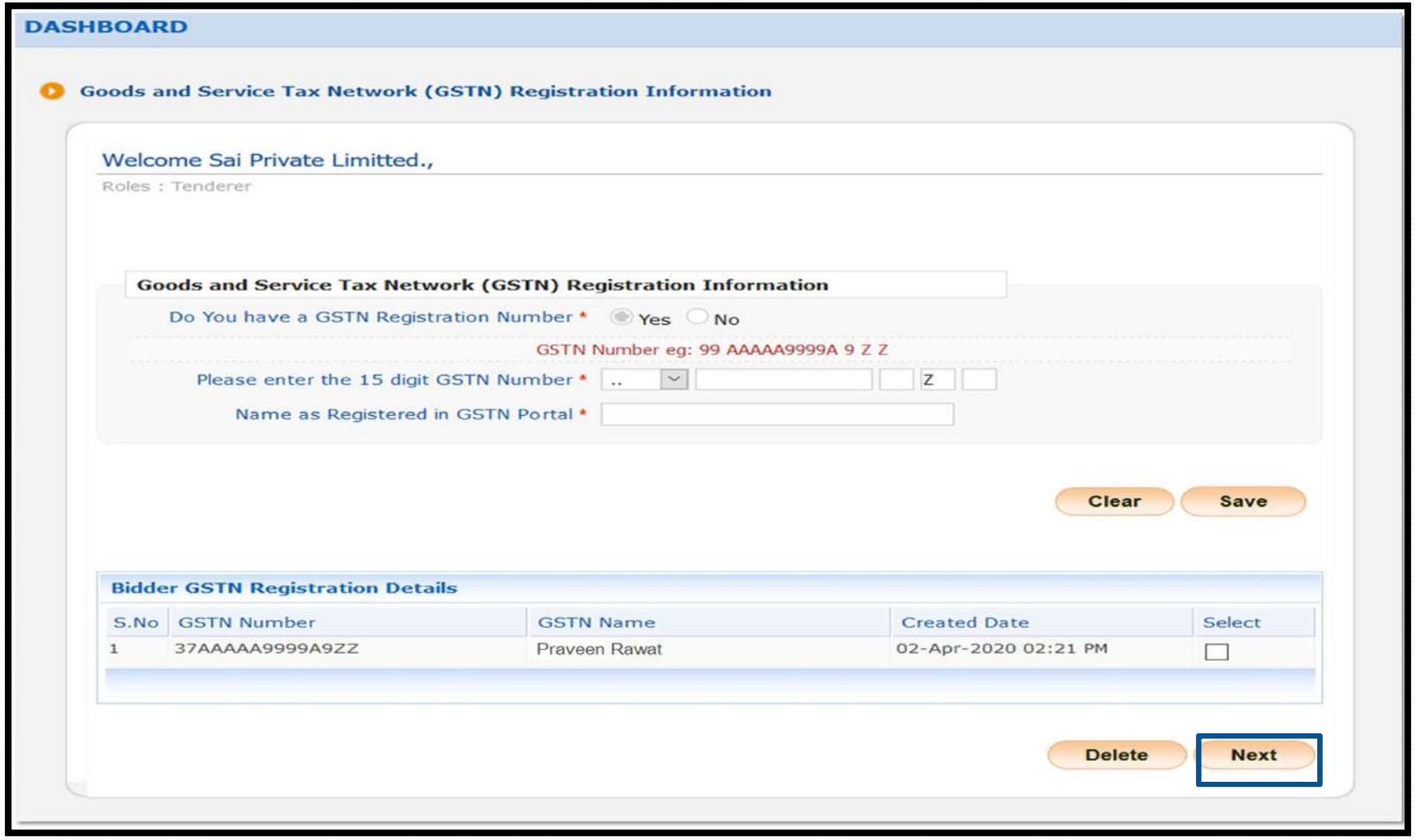
Once the Bidder clicks on the Save button, the system navigates to the page where OTP is to be entered, received through the changed E-Mail Id. The bidder enters the OTP and clicks on the Verify button to verify the entered OTP.



The bidder enters the 15 digit GSTN Number, Name as registered in GSTN Portal and clicks on the Save button to save the provided details.

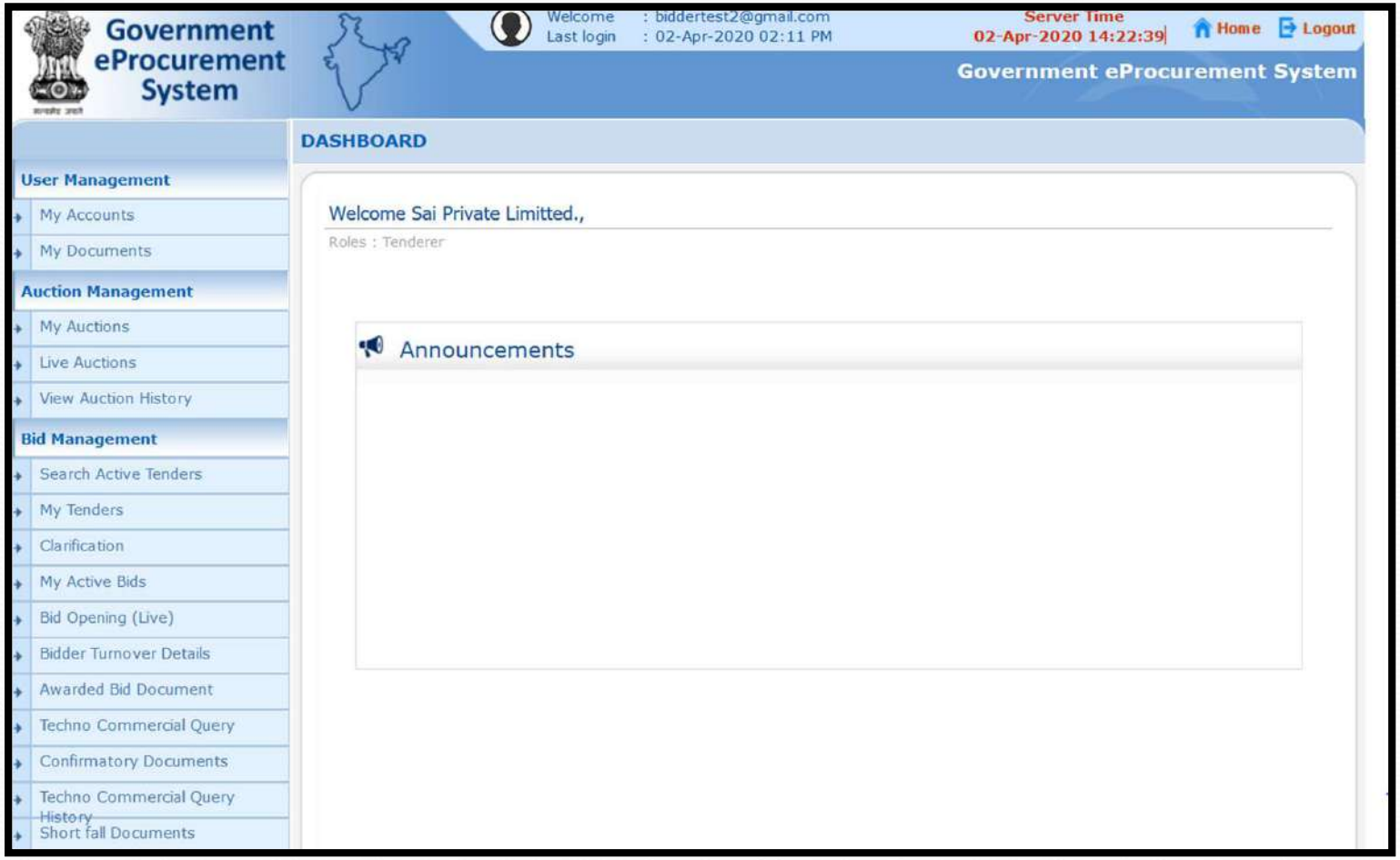


The bidder clicks on the Next button to proceed further.



The system navigates to the page where Startup India Registration Details page, where the bidder can click on the Registered radio button to provide the registration details or click on the Not Registered radio button and click on the Next button to proceed further.

Once the process is over the left Menu for the Bidder is loaded. Click on the My Accounts left menu to view the account details.



1.By Clicking the User Profile icon, The bidder can view the profile, Edit the profile, set the profile password which would be asked for editing the profile, the bidder can change the Email id & Mobile number and change the profile image.

2.By Clicking the Authentication icon, the bidder can change the password and activate & inactivate the active DSC.

3.On Clicking the Communication Ion, the bidder can select the product category for which the SMS and mail can be triggered if tenders are published under the selected product category and also the SMS and mail Notification can be selected by the bidder.

3.On selecting the Privileges icon, a provision for registering MSME and Startup India are provided.

4. On Clicking the DashBoard, the bidder can view the User Dash board.

Thank you

Bid Submission Module

Government E-PROCUREMENT System (Demo)

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Tenders by Organisation
Tenders by Classification
Tenders in Archive
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Cancelled/Retendered
Downloads
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Recognitions
Site compatibility

india.gov.in

MMP on eProcurement (Tender information for States and UT's)

Welcome to eProcurement System

The eProcurement System enables the Tenderers to download the Tender Schedule free of cost and then submit the bids online through this portal.

Latest Tenders

Tender Title	Reference No	Closing Date	Bid Opening Date
8.0m psc poles	08/2017-18		
3. Installation of Minimast Lights	A3-2111/17	20-Jul-2017 03:00 PM	22-Jul-2017 04:00
4. chk flow wilson Service	chk flow wilson		
5. chk flow wilson Service	chk flow wilson		
6. Supply of raw materials	G.2017		

Latest Tenders updates every 15 mins.

Enter Login Id & Password , Click on **Login** Button

Latest Corrigendums

Corrigendum Title	Reference No	Closing Date	Bid Opening Date
3. extention of date	45/17/G3/SN	27-Jul-2017 09:00 AM	01-Aug-2017 09:00 AM

Latest Corrigendum updates every 15 mins.

Certifying Agency

STQC

User Login

Login ID * rbidder5@nic.in

Password * ••••••••••

Login

Online Bidder Enrollment

Generate / Forgot Password?

Search with ID/Title/Reference no

Tender Search

Go

Advanced Search

Help For Contractors
Information About DSC
FAQ
Feedback
Bidders Manual Kit

Contents owned and maintained by respective tender inviting organisation / department

Designed, Developed and Hosted by | Version : 1.09.05 02-Dec-2016 | Portal policies

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- Recognitions

Digital Certificate Authentication

Welcome Wipro [rbidder5@nic.in],

1. You have registered with DSC. Please insert your DSC card / e-Token for authentication.
2. Click the 'Login' button to proceed.

S.No	Alias Name	Serial No.	Certificate Type	Expiry Date	Status
1.	M RAMA AMIRTHAM	53 3b 3b 69	Signing	26-Dec-2017 03:29 AM	Live

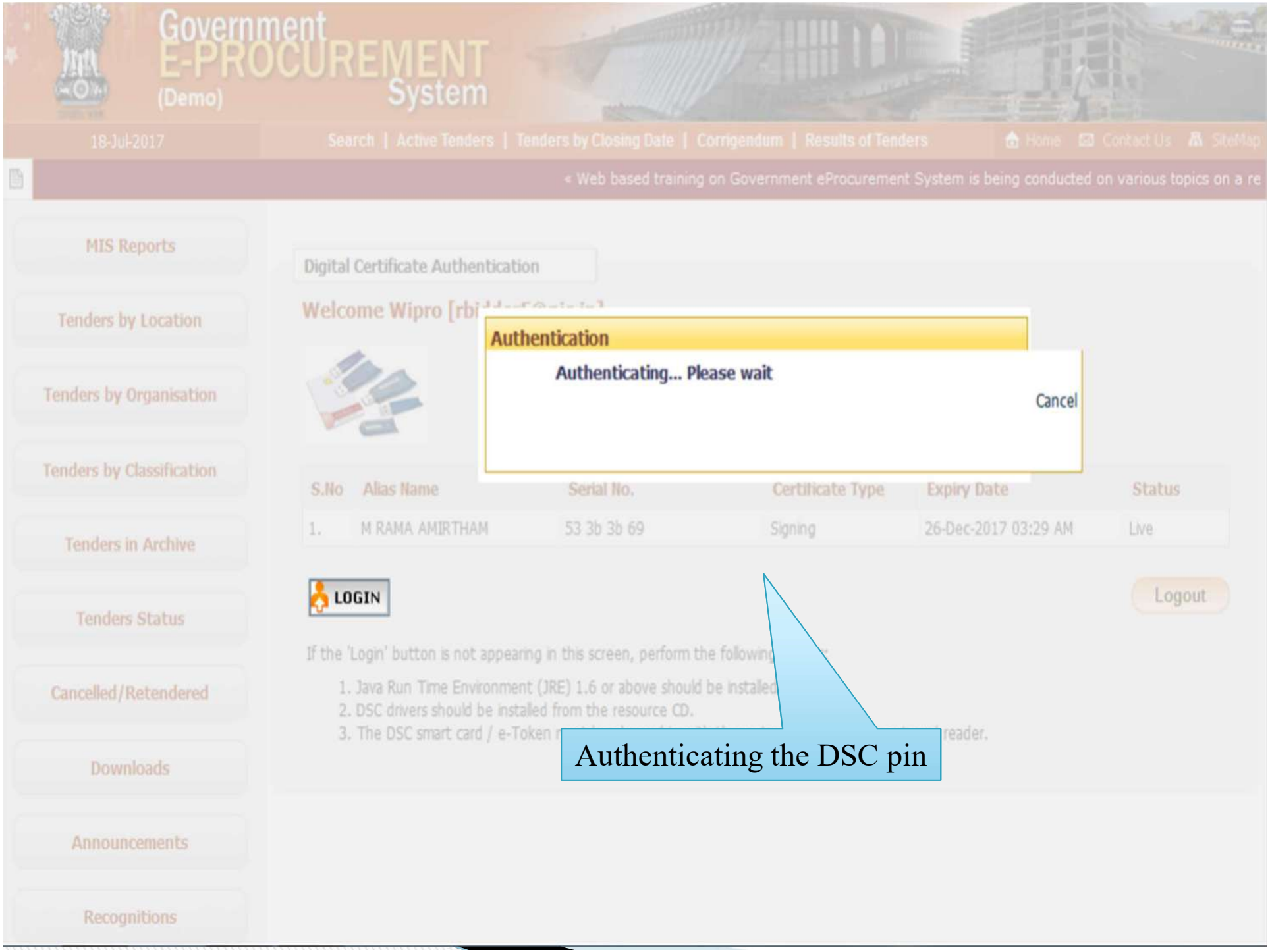
LOGIN

Logout

If the 'Log' button is not appearing in this screen, perform the following checks:

1. Jav Time Environment (JRE) 1.6 or above should be installed.
2. DSC s should be installed from the resource CD.
3. The art card / e-Token must be plugged in with the system's USB port / smart card reader.

Click on **Login** Button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System
(Demo)
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Search | Active Tenders | Tenders by Closing Date | Corrigendum | Results of Tenders
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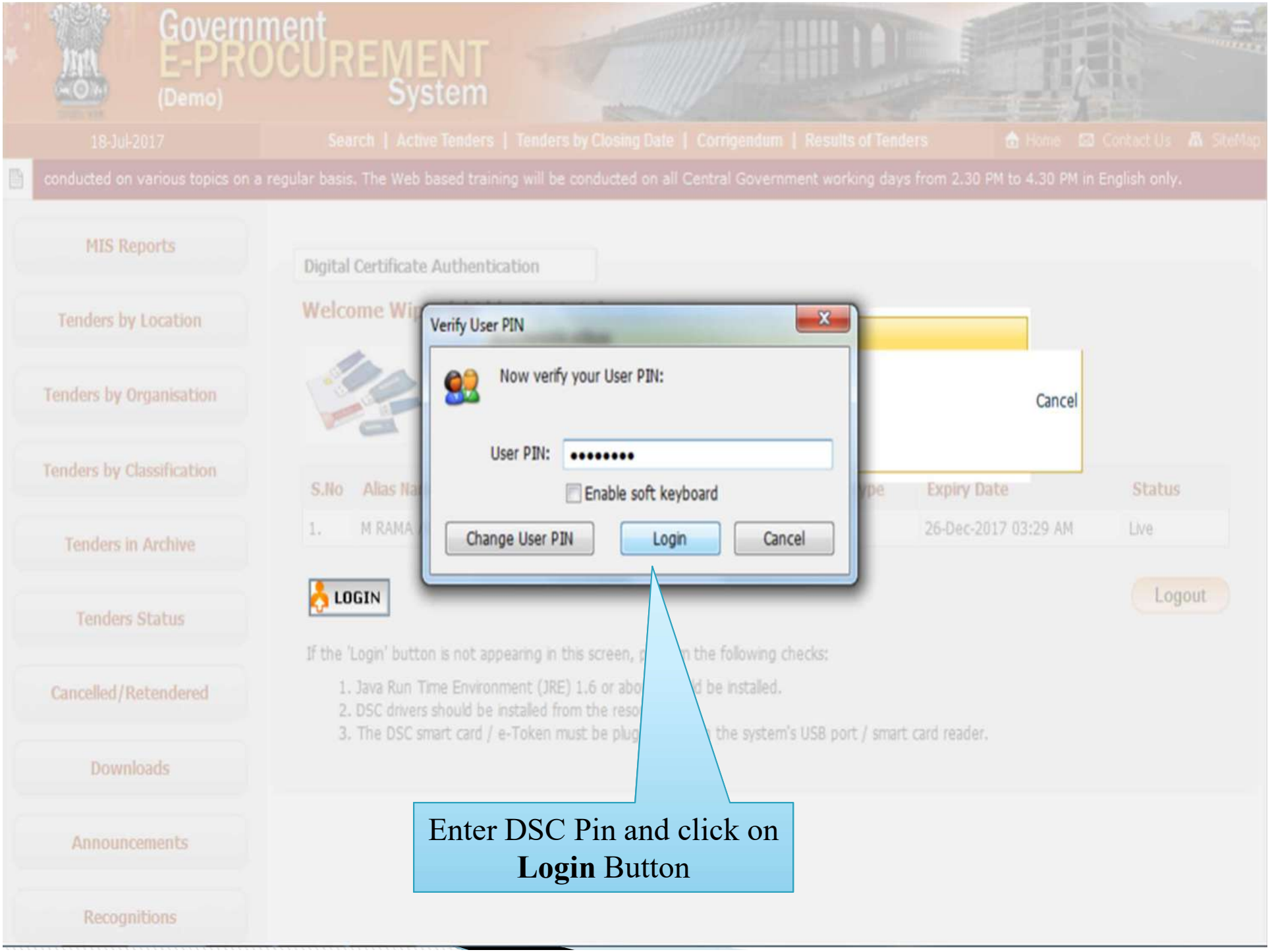
Tenders by Location
Tenders by Organisation
Tenders by Classification
Tenders in Archive
Tenders Status
Cancelled/Retendered
Downloads
Announcements
Recognitions
Digital Certificate Authentication
Welcome Wipro
Authentication
Authenticating... Please wait
Cancel
S.No
Alias Name
Serial No.
Certificate Type
Expiry Date
Status
1.
M RAMA AMIRTHAM
53 3b 3b 69
Signing
26-Dec-2017 03:29 AM
Live
LOGIN
Logout
If the 'Login' button is not appearing in this screen, perform the following
1. Java Run Time Environment (JRE) 1.6 or above should be installed
2. DSC drivers should be installed from the resource CD.
3. The DSC smart card / e-Token
reader.
Authenticating the DSC pin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conducted on various topics on a regular basis. The Web based training will be conducted on all Central Government working days from 2.30 PM to 4.30 PM in English only.
MIS Reports
Tenders by Location
Tenders by Organisation
Tenders by Classification
Tenders in Archive
Tenders Status
Cancelled/Retendered
Downloads
Announcements
Recognitions
Digital Certificate Authentication
Verify User PIN
Now verify your User PIN:
User PIN:
Enable soft keyboard
Change User PIN
Login
Cancel
Cancel
S.No
Expiry Date
Status
1.
26-Dec-2017 03:29 AM
Live
LOGIN
Logout
Enter DSC Pin and click on **Login** Button

System

DASHBOARD

User Management

- My Accounts
- My Documents

Auction Management

- My Auctions
- Live Auctions
- View Auction History

Bid Management

- Search Active Tenders
- My Tenders
- Clarification
- My Active Bids
- Bid Opening (Live)
- Techno Commercial Query History
- Confirmatory Documents
- Short fall Documents
- My Bids History
- Confirmatory Documents History
- Short Fall Documents History
- Archived Clarification

Welcome Wipro,

Roles : Tenderer

Dashboard

Announcements

Web based training on Government eProcurement System is being conducted on various topics on a regular basis. The Web based training will be conducted on all Central Government working days from 2.30 PM to 4.30 PM in English only.

Click on **Search Active Tenders**

User Management

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Search Tenders

Search Active Tenders

Organisation	-Select-	Tender ID	
Department	-Select-	Keyword #	surgical
Division	-Select-	Tender Category	-Select-
Sub Division	-Select-	Product Category	-Select-
Org Chain			
Location/City			
Tender Type	-Select-	Form of Contract	-Select-
Value Criteria	-Select-	-Select-	
Date Criteria	-Select-	From / To	

#- Keyword finds the match in tender title, work description and technical description

Cancel Submit

Search Active Tenders from the above given option and click on **Submit**

Government eProcurement System

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BID MANAGEMENT

Select the check Box

Active Tenders

Back

Open Tenders

S.No	Tender ID	Tender Title	Tender Reference Number	Product Category	Value in ₹	Favorite
1.	2017_NIC_49820_1	Tender for supply of surgical disposable and dressing items	XX-97/SO(DO)/Surgical Disposable items/2017-18/St	Medical Equipments/Waste	0	☑

Set Open Tender as Favorite

Click on **Open Tender as favorite**

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BID MANAGEMENT

Tender set as favorite successfully

Active Tenders

Tender(s) has been set as your favorite successfully

Back

Matches found : 0

Active Tenders

Sno	Tender ID	Tender Title	Tender Reference Number	Product Category	Value (INR)	Favorite
			No Active Tenders Found.			

System

DASHBOARD

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Welcome Wipro,

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Web based training on Government eProcurement System is being conducted on various topics on a regular basis. The Web based training will be conducted on all Central Government working days from 2.30 PM to 4.30 PM in English only.

Click on **My Tenders**

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My Tenders

Search

Tender ID | Tender Title

Clear | Search

My Tenders

S.No	Tender ID	Tender Reference Number	Tender Title	View
1	2017_NIC_49820_1	XX-97/SO(DO)/Surgical Disposable items/2017-18/St	Tender for supply of surgical disposable and dressing items	
2	2017_NIC_49725_1	chk flow wilson	chk flow wilson Service	

Click on **View** Icon for bid submission

Bid Submission Start Date	18-Jul-2017 03:00 PM	Bid Submission End Date	18-Jul-2017 04:00 PM

Tender Documents

NIT Document

S.No	Document Name	Description	Document Size (in KB)
1	Tendernotice_1.pdf	Notice Inviting Tender for supply of surgical disposal and dressing items	850.80

Download as zip file

Work Item Documents

S.No	Document Type	Document Name	Description	Document Size (in KB)
1	BOQ	BOQ_46134.xls	Price Bid	294.00
2	Tender Documents	AIIMSTD.pdf	Tender document for supply of surgical disposable items and dressing items	2773.76

Tender Inviting Authority

Name	Store Officer
Address	Room No. 108,1st Floor, Animal House Building, Near Biotechnology Building, AIIMS, New Delhi-110 029

Click on **Proceed For Bid Submission** Button

Back | Proceed For Bid Submission

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Government eProcurement System

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Terms & Condition

Print

eTender Portal User Agreement

In order to create a user account and use the eTender portal you must read and accept the eTender portal User Agreement.

TERMS AND CONDITIONS OF E-TENDER SERVICES AGREEMENT

YOU MAY NOT MODIFY, COPY, REPRODUCE, REPUBLISH, UPLOAD, POST, TRANSMIT, OR DISTRIBUTE, IN ANY MANNER, THE MATERIAL ON THE SITE, INCLUDING TEXT, GRAPHICS, CODE AND/OR SOFTWARE.

You may print and download portions of material from the different areas of the Site solely for your own non-commercial use pro copyright or proprietary notices from the materials.

Select the **Check Box** and Click on **Next** Button

☑ I Agree

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Login ID	rbidder5@nic.in		
Company Name	Wipro	Registration Number	ASDAS322
Establishment Year	2016	Nature of Business	Software
Legal Status	Limited Company	Company Category	Others
City	Mumbai	State	Maharashtra
Postal Code	4567789	PAN Number	CESTG2458B

Contact Details

Title *	Mrs
Contact Name*	Kaniak Rastogi
Correspondence Email*	shivanigoel.1405@gmail.com
Designation	AGM
Phone*	91 011 24305770
Mobile*	9717721686
Registered Address*	Mumbai
Name of Partners / Directors	

Enter the Contact details and Click on **Next** Button

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My Tenders → Offline Fee Payment

Organisation Chain : NIC Org||NIC_Dept

Tender Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18/St

Tender ID : 2017_NIC_49820_1

Tender Title : Tender for supply of surgical disposable and dressing items

Fee to be paid (Inclusive of Taxes) in ₹ : 1,000

Specify Instruments for Offline Payment :

Instrument Type	DD - Demand Draft	Amount *	1,000
Instrument Number *	54561265	Issuer Details *	SBI
Issued Date *	18-Jul-2017	Challan Number	
Expiry Date *	21-Sep-2017	Account Number	

Cancel Save

Fee Details

S.No	Instrument No.	Name	Issued Date	Expiry Date	Acc.No	Amount	Delete
				Details found			

Next

Enter the Instruments details for offline payment and Click on **Save** Button

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My Tenders → Offline Fee Payment

Organisation Chain : NIC Org||NIC_Dept

Tender Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18/St

Tender ID : 2017_NIC_49820_1

Tender Title : Tender for supply of surgical disposable and dressing items

Fee to be paid (Inclusive of Taxes) in ₹ : 1,000

Specify Instruments for Offline Payment :

Instrument Type	DD - Demand Draft	Amount *	
Instrument Number *		Issuer Details *	
Issued Date *		Challan Number	
Expiry Date *		Account Number	

Cancel Save

After entering details, Click on **Next** Button

Fee Details

S.No	Instrument No.	Name	Issued Date	Date	Acc.No	Amount	Delete
1	54561265	DD - Demand Draft	18-Jul-2017	21-Sep-2017		1,000	

Delete Next

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BID SUBMISSION

My Tenders → EMD Offline Payment

If, You are exempted from EMD payment, then select the option to 'Yes' and provide the details.

Are you exempted from EMD payment: Yes No

Next

Select the **Radio Button** for EMD exemption and then click on **Next**

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BID SUBMISSION

My Tenders → EMD Offline Payment

If EMD percentage amount is 100 then EMD amount to be paid after exemption is Rs. 0.00

If, You are exempted from EMD payment, then sel n to 'Yes' and provide the details.

Are you exempted from EMD payment: Ye No

If yes, Provide the exemption type: Perc tage Fixed

Percentage/Amount* 100

Actual EMD amount in ₹ : 50,000

Only pdf,jpg files are permitted to upload.

Upload EMD exemption document:*

Next

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My Tenders → EMD Offline Payment

If, You are ex

Are you ex

If yes,

Only pdf,jpg f

Upload

EMD Payment

EMD amount to be paid after exemption: ₹ 0.00

Next

Showing EMD amount is Rs. 0.00

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BID SUBMISSION

My Tenders → EMD Offline Payment

If, You are exempted from EMD payment, then select the option to 'Yes' and provide the details.

Are you exempted from EMD payment: Yes No

If yes, Provide the exemption type: Percentage Fixed

Percentage/Amount* 100

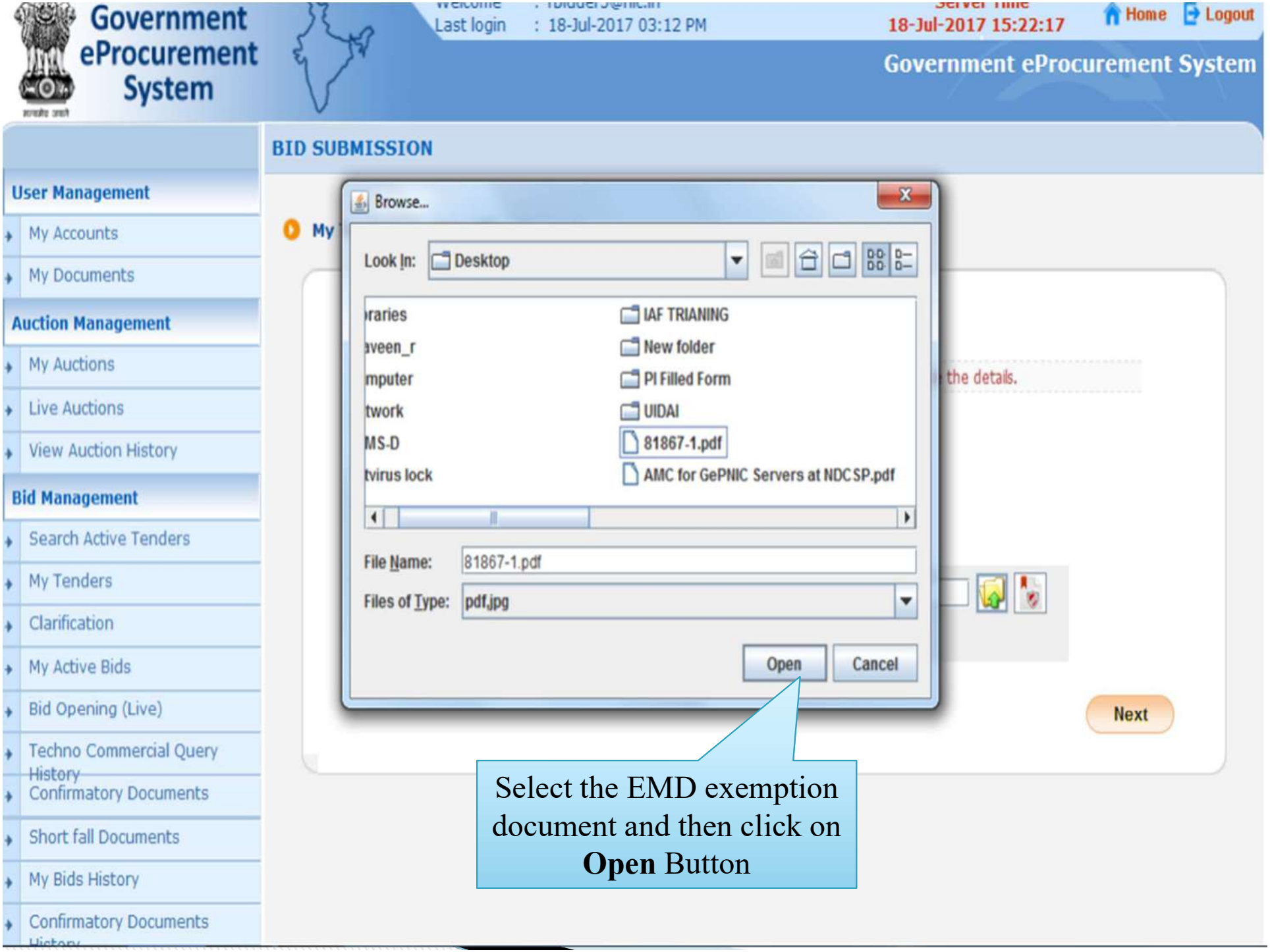
Actual EMD amount in ₹ : 50,000

Only pdf,jpg files are permitted to upload.

Upload EMD exemption document:*

Next

1) Enter EMD payment details and select the icon to upload EMD exemption document.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Browse...
Look In: Desktop
IAF TRIANING
New folder
PI Filled Form
UIDAI
81867-1.pdf
AMC for GePNIC Servers at NDCSP.pdf
File Name: 81867-1.pdf
Files of Type: pdf,jpg
Open
Cancel
the details.
Next
Select the EMD exemption document and then click on **Open** Button

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My Tenders → EMD Offline Payment

If, You are exempted from EMD payment, then select the option to 'Yes' and provide the details.

Are you exempted from EMD payment: Yes No

If yes, Provide the exemption type: Percentage Fixed

Percentage/Amount* 100

Actual EMD amount in ₹ : 50,000

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Upload EMD exemption document:* :\Users\praveen_r\Desktop\81867-1.pdf

Next

click on this Icon to digitally sign the document

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My Tenders → EMD Offline Payment

If, You are ex

Are you ex

If yes,

Actual EMD amount in ₹ : 50,000

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Upload EMD exemption doc

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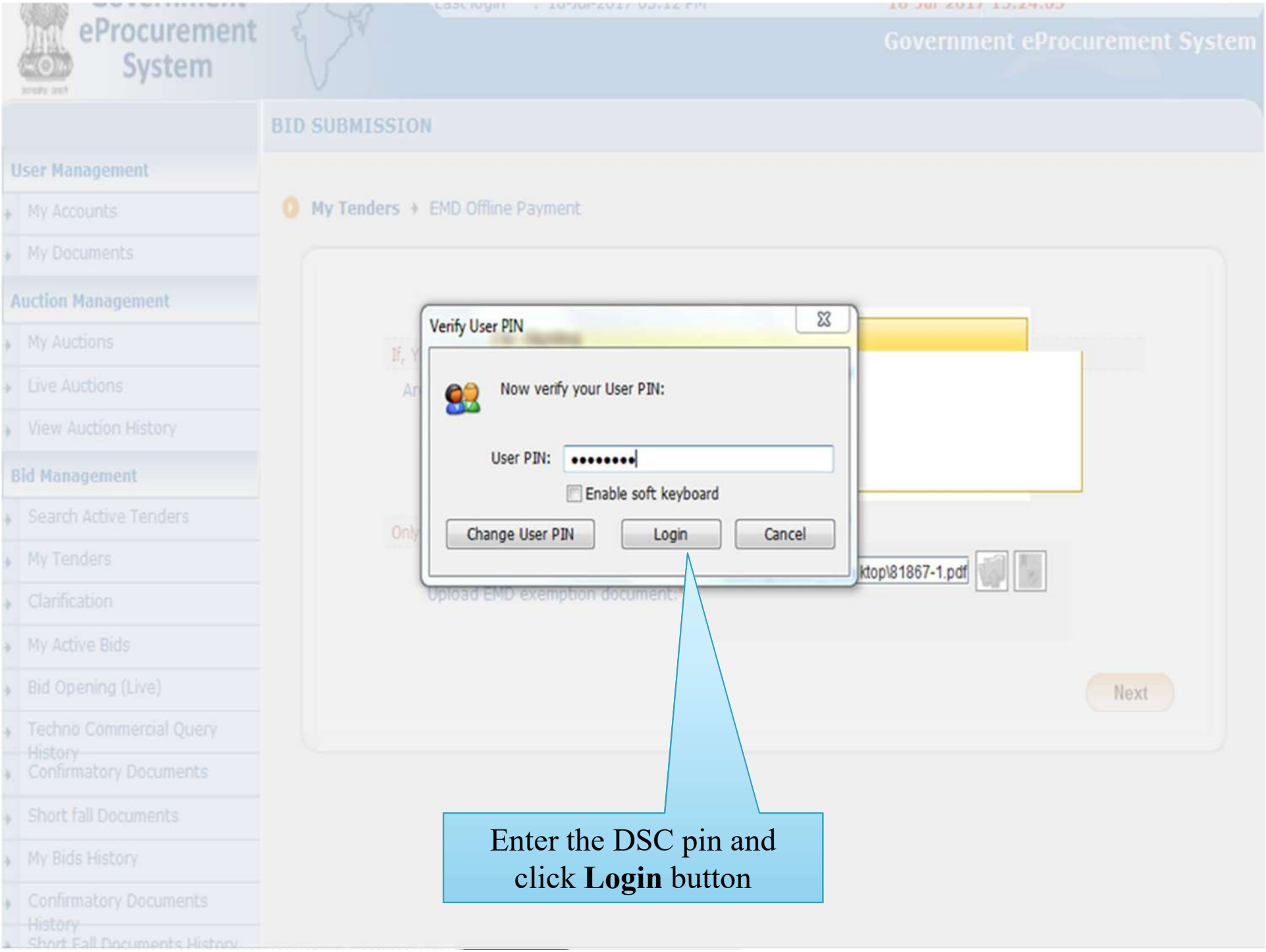
File Signing

Digital signing in progress... Please wait

Digitally signing

Next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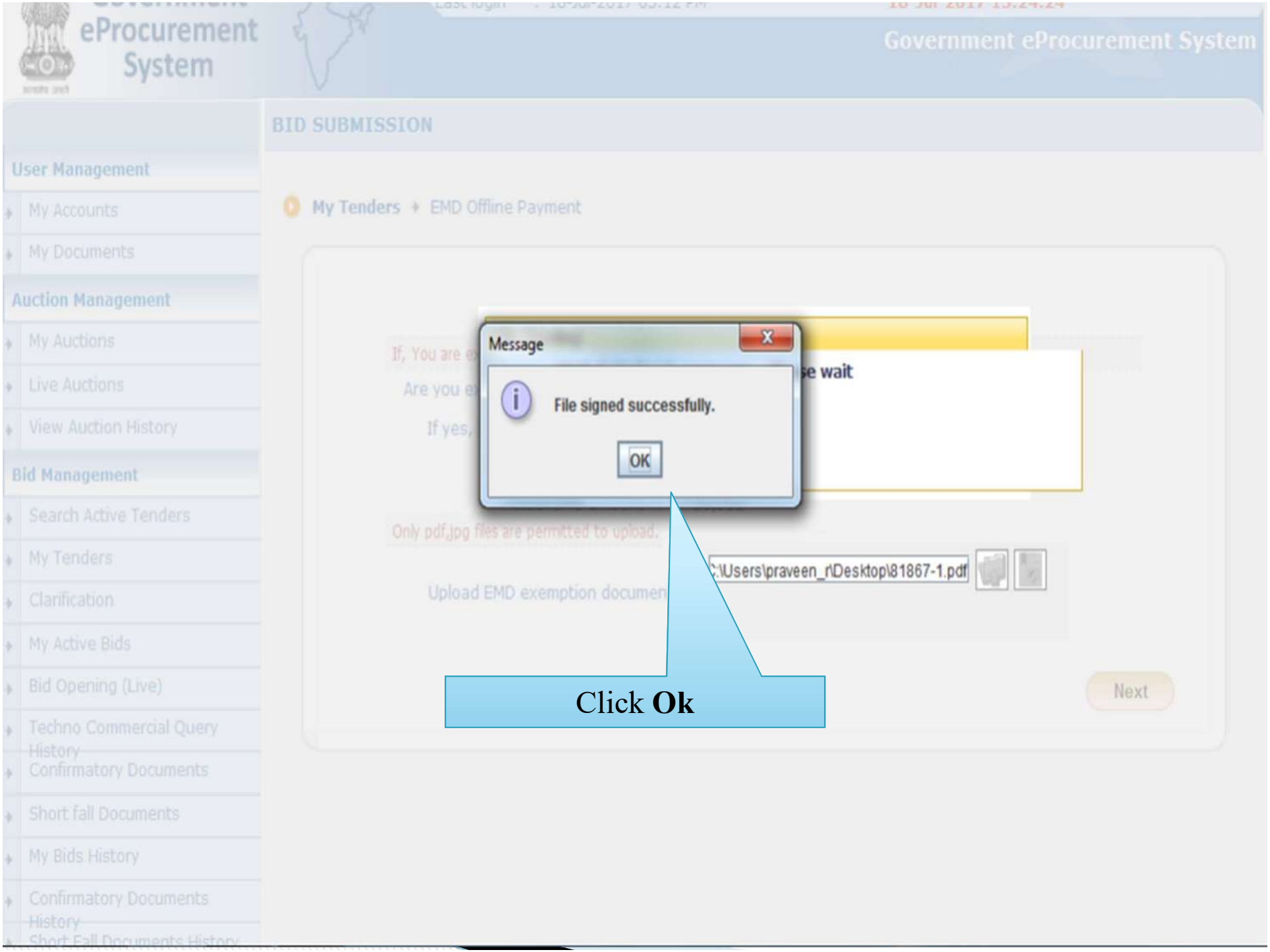
Verify User PIN
Now verify your User PIN:
User PIN:
Enable soft keyboard
Change User PIN
Login
Cancel
Next
Enter the DSC pin and click **Login** button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EMD Offline Payment
Message
File signed successfully.
OK
Only pdf,jpg files are permitted to upload.
Upload EMD exemption documen
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Next
Click Ok

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My Tenders → EMD Offline Payment

If, You are exempted from EMD payment, then select the option to 'Yes' and provide the details.

Are you exempted from EMD payment: Yes No

If yes, Provide the exemption type: Percentage Fixed

Percentage/Amount* 100

Actual EMD amount in ₹ : 50,000

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Click on **Next** button

eProcurement System

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My Tenders → 2017_NIC_49820_1 → Transaction Message

Click on **Action** Icon for entering interested items

Organization Chain : NIC Org||NIC_Dept

Tender Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18

Tender ID : 2017_NIC_49820_1

Tender Title : Tender for supply of surgical disposable and dressin s

Bid Process List

S.No	Bid Process	Action
1	ITE Details	
2	Profile	

Bid Payment Details

S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee	Edit
1	Tender Fee	1000.00 (INR)	0.00	0.00	1000.00 (INR)	
2	Emd Fee	50000.00 (INR)	50000.00 (INR)	0.00	0.00	

Encrypt&Upload

- Search Active Tenders
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Bidder Item Wise Evaluation

1. Select **Yes/No** against each item to show interest

S.No	Item Code	Description			ed Yes/No
1		Disposable Syringes with Needle with leur lock (Sterilized) (ISO) *Reuse prevention breakable plunger syringe with possibility of multiple aspirations,			
2	item1	Size: 1 ml (As and when required)	Nos	1.00	Yes
3	item2	Size: 2 ml	Nos	50000.00	Yes
4	item3	Size: 5 ml	Nos	50000.00	Yes
5	item4	Size: 10 ml	Nos	50000.00	Yes
6	item5	Size: 20 ml (As and when required)	Nos	1.00	Yes
7	item6	Size: 50CC	Nos	30000.00	No
8		Disposable Syringes without Needle without leur lock (Sterilized) *Reuse prevention breakable plunger syringe with possibility of multiple aspirations			
9	item7	Size: 2 ml	Nos	50000.00	Yes
10	item8	Size: 5 ml	Nos	50000.00	Yes
11	item9	Size: 10 ml	Nos	50000.00	Yes
12	item10	Size: 20 ml (As and when required)	Nos	1.00	Yes
13	item11	Size: 50 ml	Nos	20000.00	Yes
14	item12	Disposal Syringe with Needle with Leur Lock (Sterlized) (ISI/ISO/CE) Size: 1CC	Nos	20000.00	Yes
15	item13	Auto destructive disposal Syringes with leur lock. The syringe on completing the injection should lock to prevent any reuse. Non reuseable involuntary activated auto disable syringes Size: 1ml	Nos	1.00	Yes

Back Save

2. Click on Save

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No of sheets :	1	Total item(s) available in sheet(s) :	13
Eligible item(s) as quoted :	12	Not eligible item(s) as quoted :	1 Click to View

View Bidder Item Wise Evaluation List

S.No	Sheet Name	Item Code	Description	Units	Quantity	Bidder Value
1	BoQ1	item1	Size: 1 ml (As and when required)	Nos	1.00	Yes
2		item2	Size: 2 ml	Nos	50000.00	Yes
3		item3	Size: 5 ml	Nos	50000.00	Yes
4		item4	Size: 10 ml	Nos	50000.00	Yes
5		item5	Size: 20 ml (As and when required)	Nos	1.00	Yes
6		item6	Size: 50CC	Nos	30000.00	No
7		item7	Size: 2 ml	Nos	50000.00	Yes
8		item8	Size: 5 ml	Nos	50000.00	Yes
9		item9	Size: 10 ml	Nos	50000.00	Yes
10		item10	Size: 20 ml (As and when required)	Nos	1.00	Yes
11		item11	Size: 50 ml	Nos	20000.00	Yes
12		item12	Disposal Syringe with Needle with Leur Lock (Sterlized) (ISI/ISO/CE) Size: 1CC	Nos	20000.00	Yes
13		item13	Auto destructive disposal Syringes with leur lock. The syringe on completing the injection should lock to prevent any reuse. Non reuseable involuntary activated auto disable syringes Size: 1ml	Nos	1.00	Yes

Click on **Next** Button.

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My Tenders → 2017_NIC_49820_1 → Transaction Message

Organization Chain : NIC Org||NIC_Dept

Tender Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18/St

Tender ID : 2017_NIC_49820_1

Tender Title : Tender for supply of surgical disposable and dressing items

Bid Process List

S.No	Bid Process	Action
1	ITE Details	
2	Profile	

Bid Payment Details

S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee	Edit
1	Tender Fee	1000.00 (INR)	0.00	0.00	1000.00 (INR)	
2	Emd Fee	50000.00 (INR)	50000.00 (INR)	0.00	0.00	

Encrypt&Upload

Click on **Encrypt&Upload** Button.

Government eProcurement System

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Bid Submission → Packet Details

Organisation Chain : NIC Org||NIC_Dept

der Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18/St

Tender ID : 2017_NIC_49820_1

Tender Title : Tender for supply of surgical disposable and dressing items

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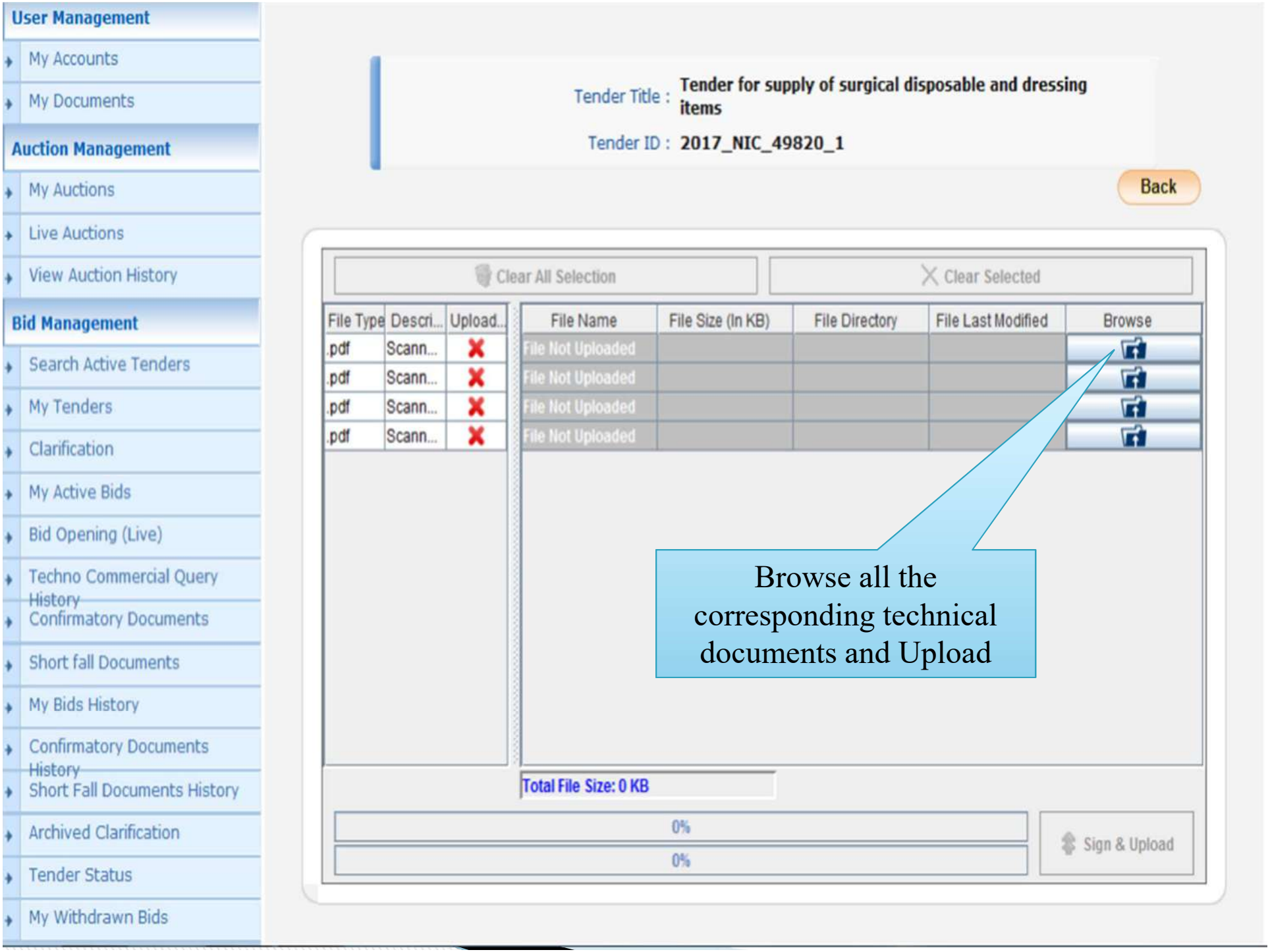
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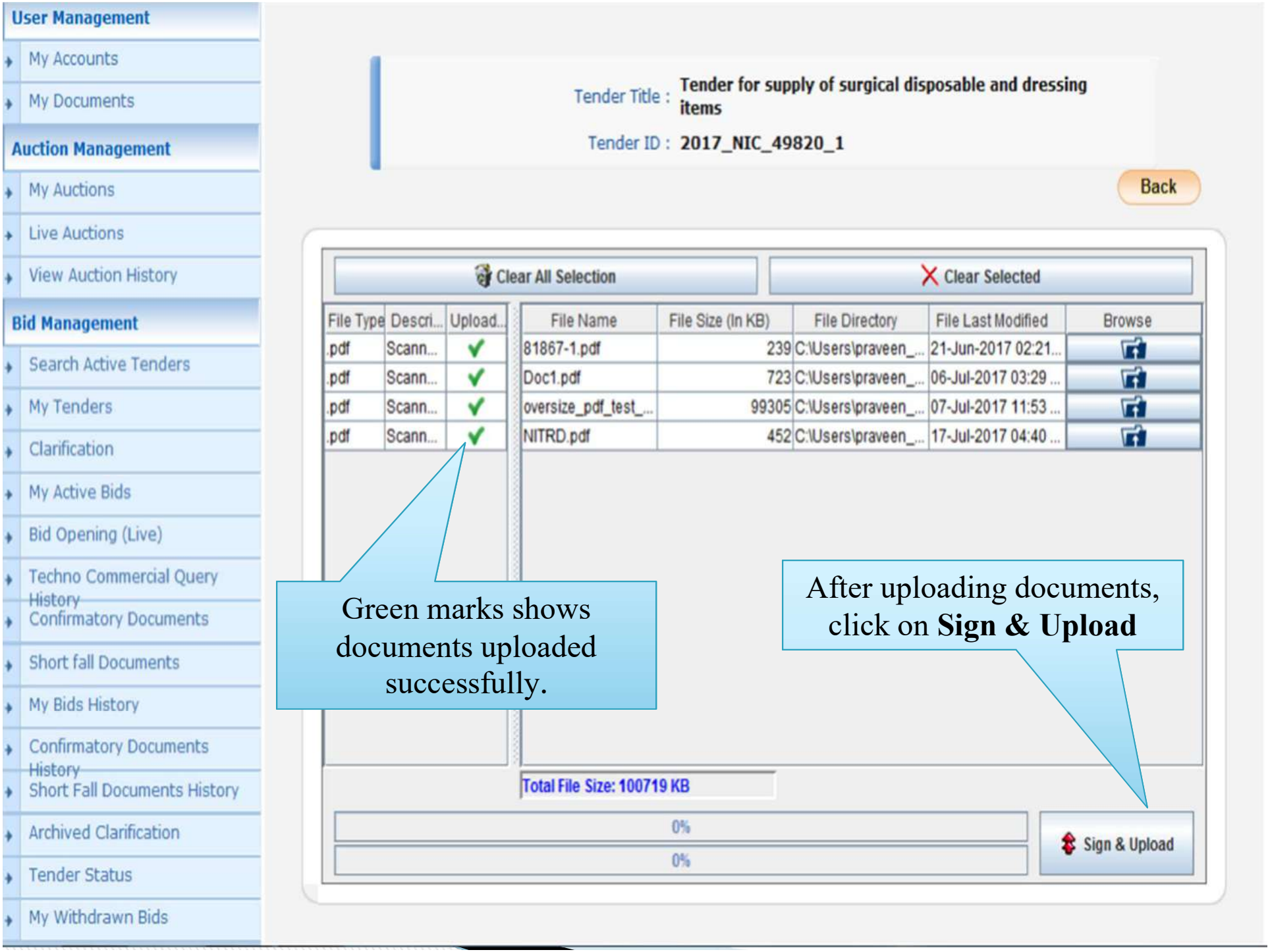
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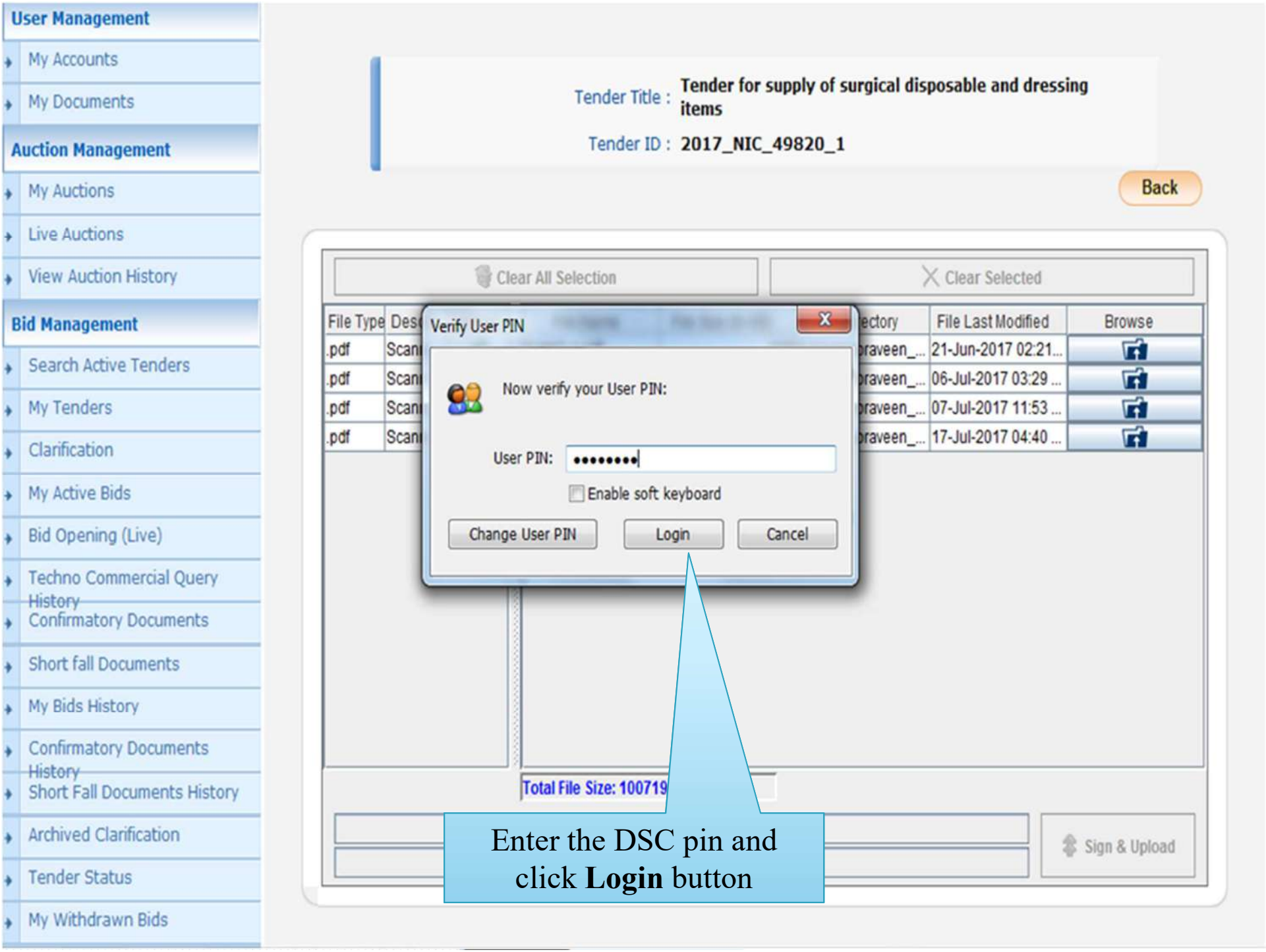
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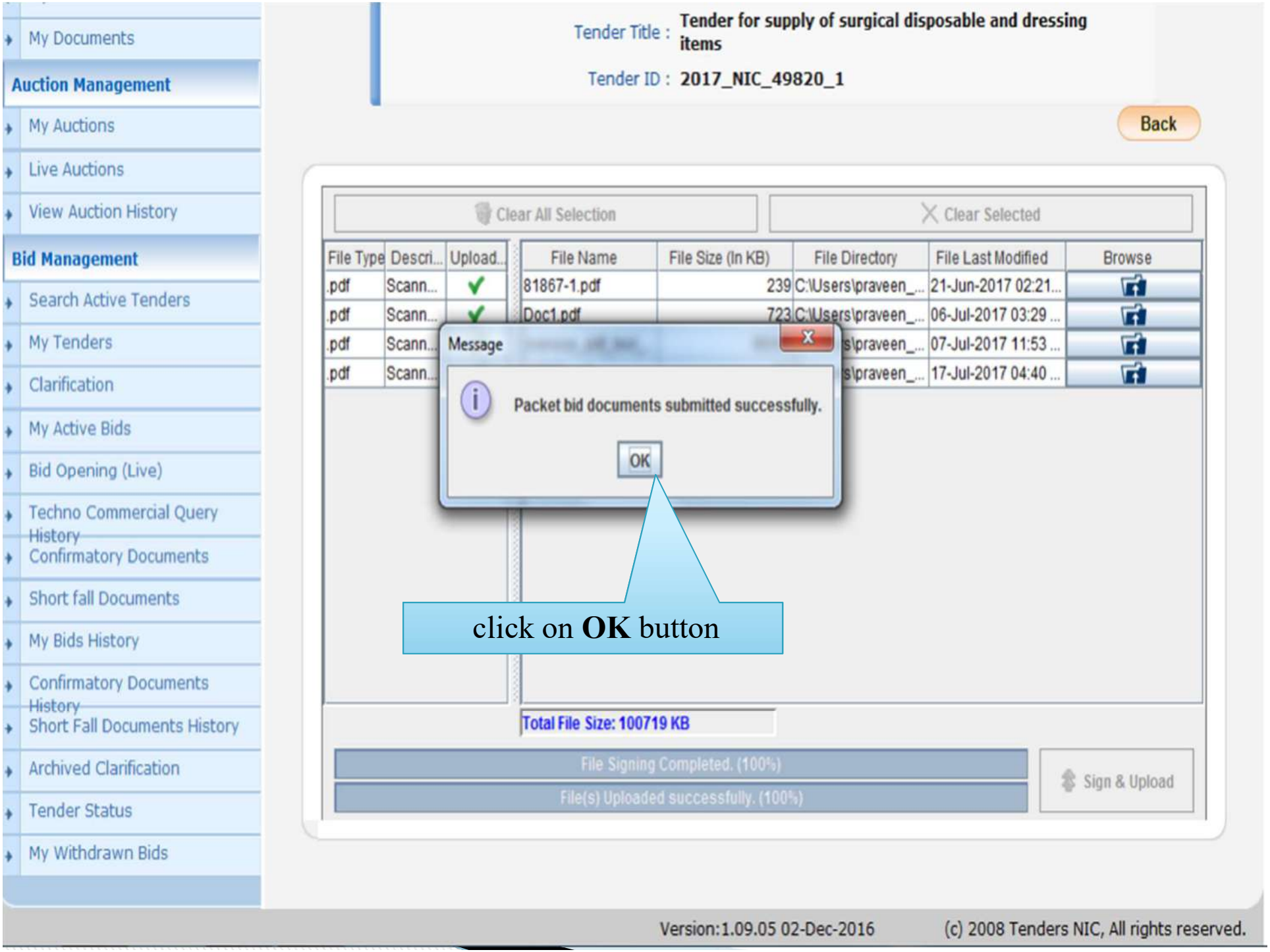
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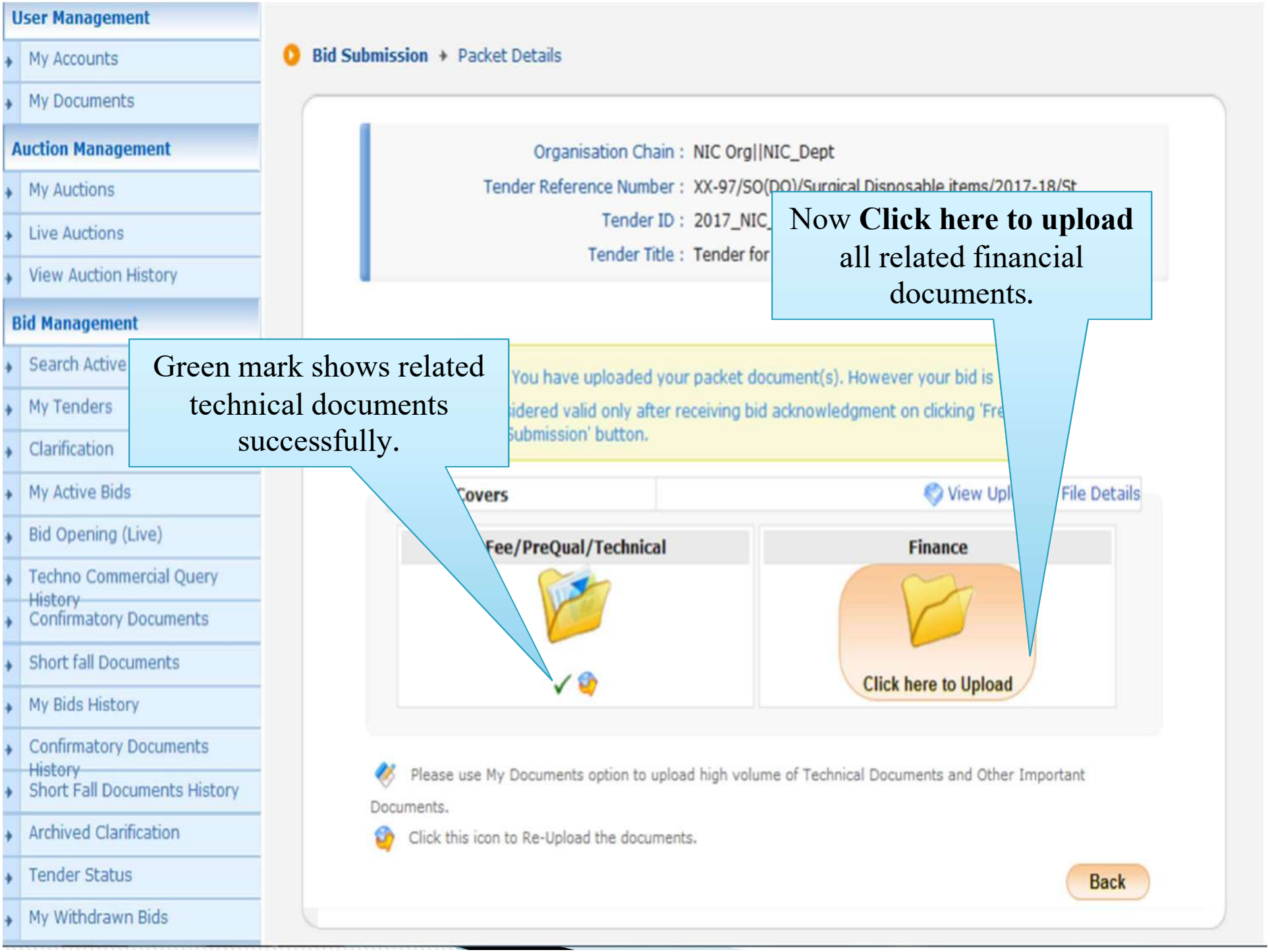
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Tender ID : **2017_NIC_49820_1**

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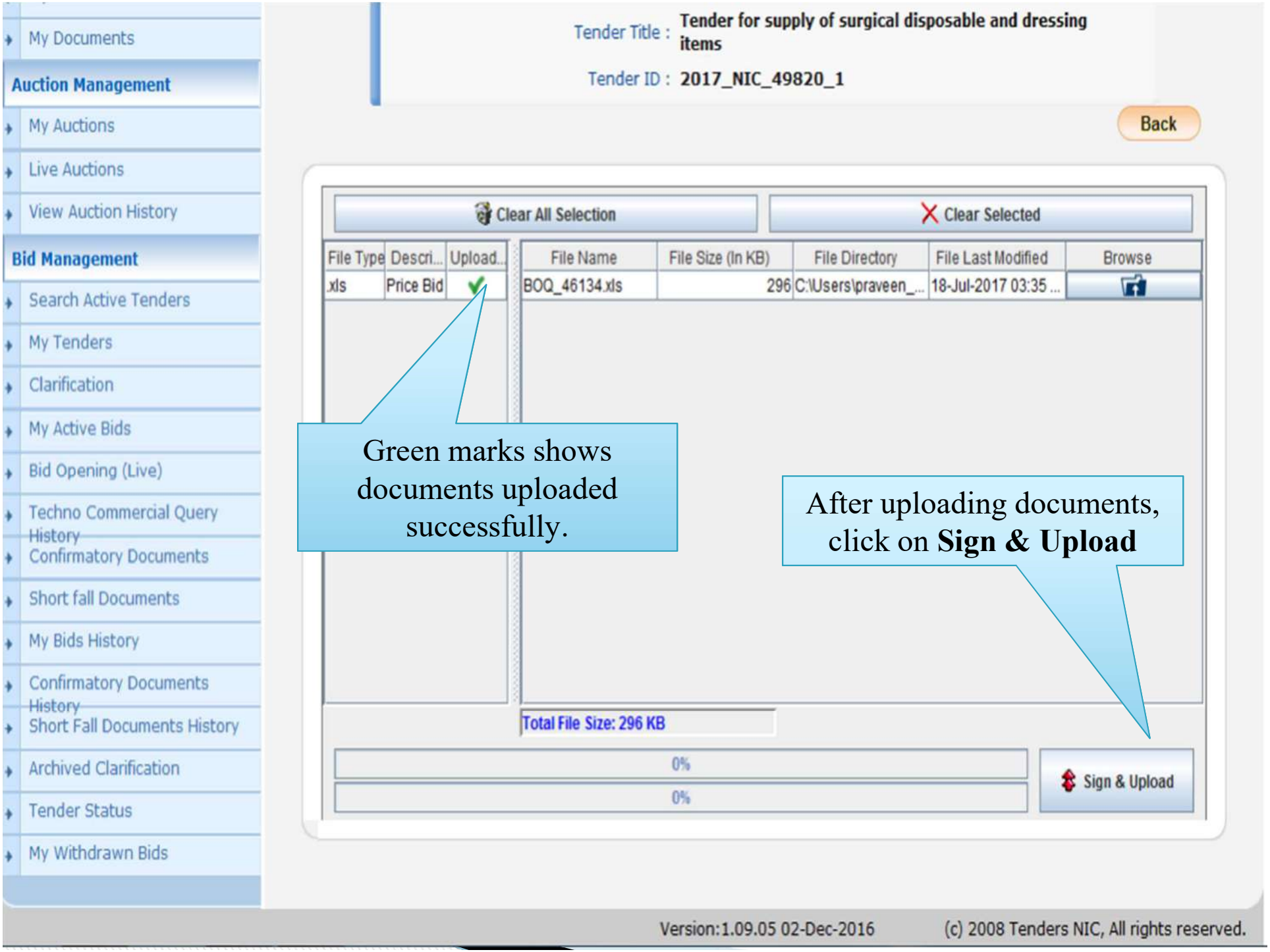
PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit RATE In Figures To be entered by the Bidder in Rs. P	GST Rates in % on Unit Rates	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT With Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	14	53	54	55
1	Disposable Syringes with Needle with leur lock (Sterilized) (ISO) *Reuse prevention breakable plunger syringe with possibility of multiple aspirations,							
1.01	Size: 1 ml (As and when required)	1	Nos	31.00	5.00	31.00	32.55	INR Thirty Two and Paise Fifty Five Only
1.02	Size: 2 ml	50000	Nos	32.00	5.00	1600000.00	1680000.00	INR Sixteen Lakh Eighty Thousand Only
1.03	Size: 5 ml	50000	Nos	35.00	5.00	1750000.00	1837500.00	INR Eighteen Lakh Thirty Seven Thousand Five
1.04	Size: 10 ml	50000	Nos	41.00	5.00	2050000.00	2152500.00	INR Twenty One Lakh Fifty Two Thousand Five
1.05	Size: 20 ml (As and when required)	1	Nos	60.00	5.00	60.00	63.00	INR Sixty Three Only
1.06	Size: 50CC	30000	Nos			0.00	0.00	INR Zero Only
2	Disposable Syringes without Needle without leur lock (Sterilized) *Reuse prevention breakable plunger syringe with possibility of multiple aspirations							
2.01	Size: 2 ml	50000	Nos	21.00	5.00	1050000.00	1102500.00	INR Eleven Lakh Two Thousand Five Hundred Only
2.02	Size: 5 ml	50000	Nos	25.00	5.00	1250000.00	1312500.00	INR Thirteen Lakh Twelve Thousand Five Hundred
2.03	Size: 10 ml	50000	Nos	28.00	5.00	1400000.00	1470000.00	INR Fourteen Lakh Seventy Thousand Only
2.04	Size: 20 ml (As and when required)	1	Nos	32.00	5.00	32.00	33.60	INR Thirty Three and Paise Sixty Only
2.05	Size: 50 ml	20000	Nos	35.00	5.00	700000.00	735000.00	INR Seven Lakh Thirty Five Thousand Only
3	Disposal Syringe with Needle with Leur Lock (Sterlized) (ISI/ISO/CE) Size: 1CC	20000	Nos	50.00	5.00	1000000.00	1050000.00	INR Ten Lakh Fifty Thousand Only
4	Auto destructive disposal Syringes with leur lock. The syringe on completing the injection should lock to prevent any reuse. Non reuseable involuntary activated auto disable syringes Size: 1ml	1	Nos	65.00	5.00	65.00	68.25	INR Sixty Eight and Paise Twenty Five Only
Total in Figures						3350031.00	3517532.55	INR Thirty Five Lakh Seventeen Thousand Five Hundred & Thirty Two and Paise Fifty Five Only

Quoted Rate in Words	INR Thirty Five Lakh Seventeen Thousand Five Hundred & Thirty Two and Paise Fifty Five Only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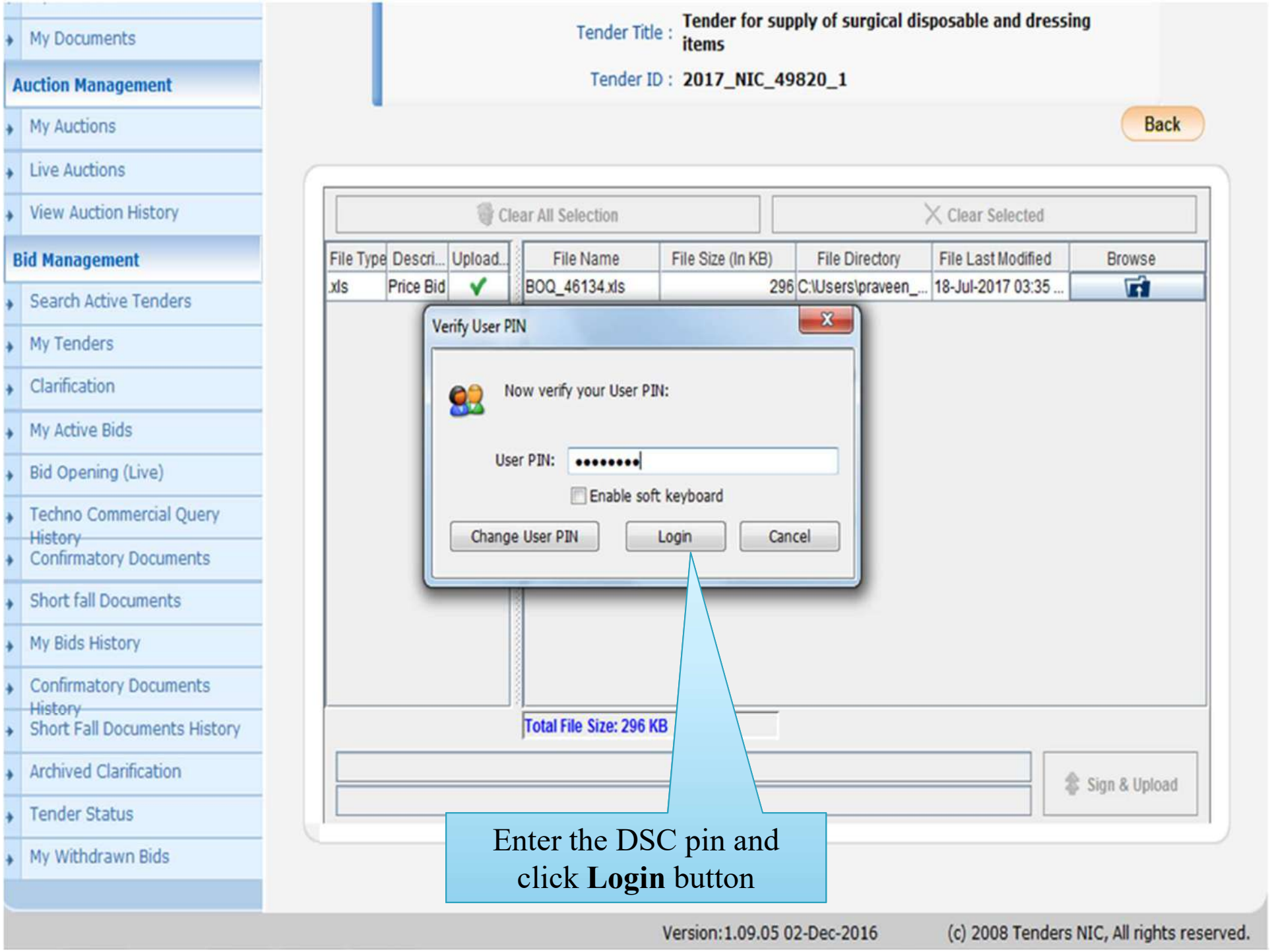
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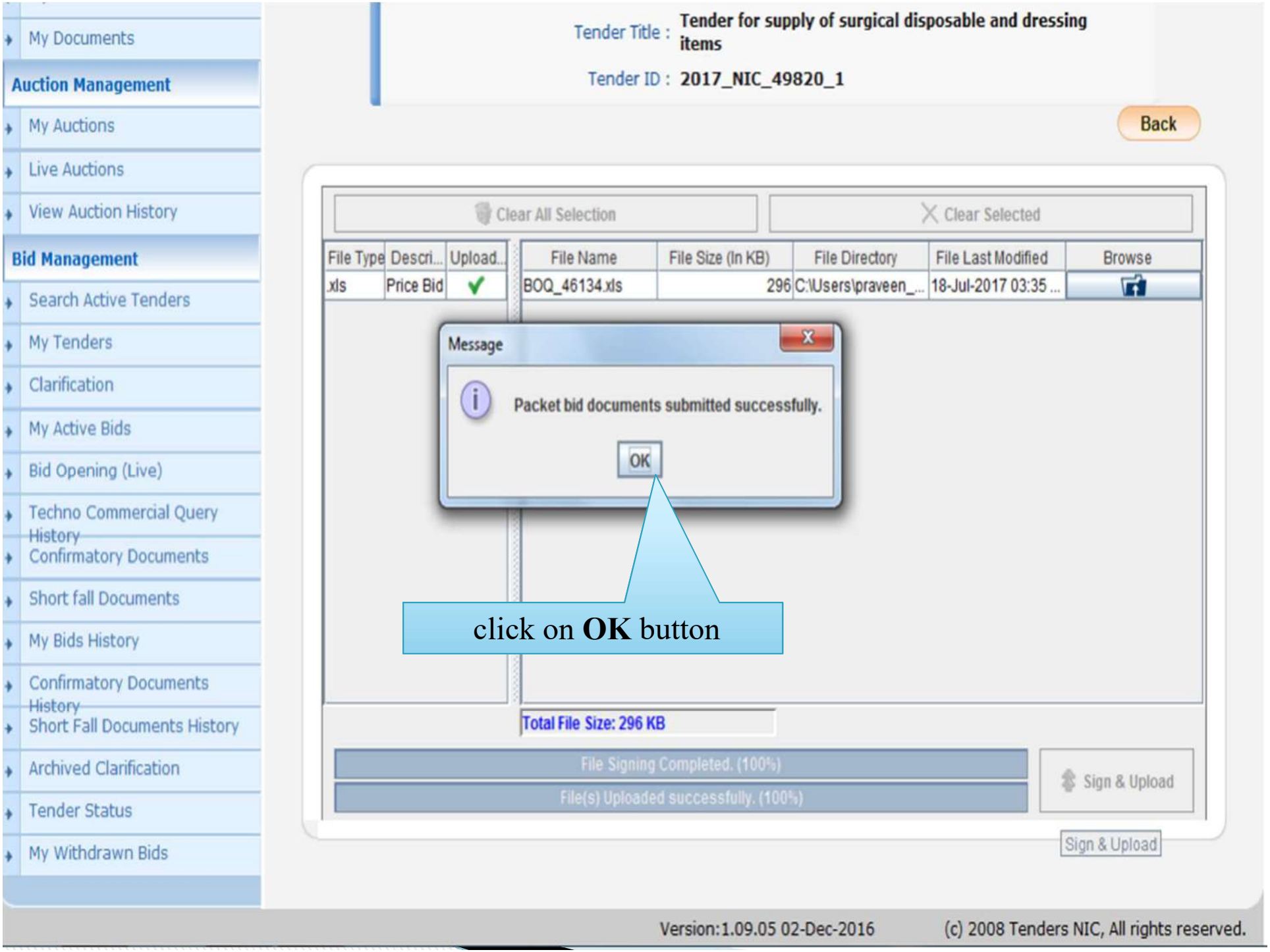
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		NITRD.pdf	Scanned copy of Manufacturer Authorisation form , Documents with GIT clause 17 and performance certi	452.00	G+pt5LsvmaAYcvywvmY9rf1ob7k=
		NIT.pdf	Scanned copy of checklist as per section VII	838.00	3mBNAYOKG3exNWUVUNbLWOjWU7U=
2	Finance	BOQ_46134.xls	Price Bid	296.00	0DYJ2PgnJ66alNW6zqrRXOv32Co=

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Bid Acknowledgement

Bid Acknowledgement

Print Bid Details

Print Acknowledgement

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इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि.
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ENGINEERING PROJECTS (INDIA) LTD.
(A Government of India Enterprise)

AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

NIT No: PCO/BBSR/933/155

FOR

Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

VOLUME – II

Scope of Work and Technical
Specifications & Drawings

A. SCOPE OF WORK

1.1 The scope of work shall cover, but shall not be exclusively limited to, the following:

a. Supply of all materials viz, raw steel, and paints
b. Supply of consumables like electrodes for welding, gases for gas cutting etc
c. Supply of plant & machinery, tools tackles, Hydra etc., instruments for fabrication, machining (if required) of Structural Steel except unloading at site.
d. Providing facilities for testing of materials and conducting NDT if Required.
e. Providing facilities for transport and handing over the material to EPI yard at site.
f. Deploying requisite skilled and unskilled manpower for fabrication (Two coat primer).
g. Sand Blasting, Fabrication of structures and transport to site
h. Application of paints at shop after fabrication
i. Providing all reasonable facilities for inspection by Bidder.
j. Conducting NDT as stipulated by the Owner and making test results available to owner / Consultant for evaluation
k. Compliance with preliminary acceptance tests / inspection, liquidation of defects.

B. FABRICATION OF STEEL STRUCTURES

2.1 Material of Construction

All steel and other materials used for steelwork and in association with steelwork shall conform to appropriate Indian standards. Only tested materials shall be used unless written authority is obtained for the use of untested materials for certain secondary structural members. Tentatively the following items shall be used for fabrication: Rolled Section Beams (ISMB 200 – 300), Chanel (ISMC 75 – 250), Angel (ISA 50X50X6 and 75x75x8), Plates (3.15mm, 6mm, 8mm, 10mm, 12mm) etc. The section of structural Steel is indicative only and it may change during fabrication and as per fabrication drawing.

a) All rolled sections and plates up to & including 20 mm thickness shall conform to Grade "A" as per IS : 2062.
b) Plates of thickness above 20 mm and Plated structures subjected to dynamic loading shall conform to Grade "B" as per IS: 2062.
c) For High Tensile steel requirements, material conforming to IS: 8500 or SAIL- MA (HYA or HYB) shall be used.

i. Steel sheets shall conform to IS: 1079.
ii. Steel tubes for structural purpose shall conform to IS: 1161 (of Grade Yst 240)
iii. Translucent sheets shall be fibreglass reinforced polyester sheets of matching profile as per IS: 12866.
iv. Colour coated sheets shall be as per appropriate standard.
v. Gutters shall be of copper bearing steel conforming to Grade "A" as per IS: 2062.
vi. Rails shall conform to IS: 3443.
vii. All black bolts, nuts and locknuts shall conform to IS: 1363 and IS: 1364 (for precision and semi precision hexagonal bolts) of property class 6.4 unless otherwise specified. Washers shall conform to IS: 6610.
viii. All tapered washer shall be as per IS: 5372 for channels, and IS: 5374 for Joists. Spring washers shall conform to IS: 3063.
ix. All HSFG bolts shall conform to IS: 3757. Assembly of joints using HSFG bolts shall conform to IS: 4000. Nuts and washers for HSFG bolts shall be as per IS: 6623 & IS: 6649 respectively.

x. Covered electrodes for arc welding shall conform to IS: 814.
xi. Certified mill test reports of materials used in the work shall be

2.2 Fabrication

2.2.1 Fabrication of all structural steelwork shall be in accordance with IS:800 or their equivalent foreign national standard of the country of origin of supply unless otherwise specified, and in conformity with various clauses of the Technical Specification.

2.2.2 Wherever practicable and wherever perfect matching of parts is required at site, members shall be shop assembled before despatch to minimise site work. Parts not completely assembled in the shop shall be secured, to the extent possible, to prevent damage during despatch.

2.2.3 All pieces shall be properly identified and bundled for transportation to work site. Care shall be exercised in the delivery, handling and storage of material to ensure that material is not damaged in any manner. Materials shall be kept free of dirt, grease and foreign matter and shall be protected from corrosion. All materials shall be stored properly on skids above the ground which shall be kept clean and properly drained. Girders and beams shall be placed upright and stored. Long members such as columns and chord members shall be supported on skids spaced near enough to prevent damage due to deflection.

2.2.4 All fabricated pieces shall bear erection mark numbers painted/punched according to appropriate erection and shop drawings at a prominent location on the structure for easy identification.

2.2.5 All workmanship shall be in accordance with the best practice in modern structural shops. Greatest accuracy shall be achieved in the manufacture of every part of the work and all identical parts shall be strictly interchangeable.

2.2.6 Shearing or flame cutting may be used at the Contractor's option provided that a mechanically controlled cutting torch is used for flame cutting and that the resulting edges are clean and straight.

2.2.7 Unless clean square and true to shape all flame cut edges shall be planed/cleaned by chipping or grinding. Where machine flame cutting is permitted for high tensile steel, special care shall be taken to leave sufficient margin and all flame hardened material shall be removed by machining/edge grinding.

2.2.8 Wherever shearing is used for cutting to size, sheared members shall be free from distortions at sheared edge.

2.2.9 Each piece shall be distinctly marked before delivery, in accordance with an approved marking diagram and shall bear such other marks as well to facilitate erection. For easy identification at site a small distinguishing mark for each building shall be painted at each end of every member before despatch from fabrication shop. The fabricated steel work shall be despatched in sequence as per agreed programme and for such portion as may be found convenient for erection or as ordered by the Owner / Consultant.

2.2.10 The Contractor shall provide suitable packing wherever necessary to guard against damage during handling and transportation to site. All fabricated parts shall be adequately braced to prevent damage during transit.

2.2.11 The tolerances for fabrication of steel structures shall generally conform to IS:7215 and to suit the technological requirements as specified by the equipment supplier.

2.2.12 Any fabrication work which is considered not to be in keeping with the Technical Specification forming the Contract, or in absence of Technical Specification with recognized good practice, shall be rectified /replaced /corrected at the Contractor's expense as directed by the Owner / Consultant. Site fabrication work shall also conform to all specifications, stipulations, terms and conditions applicable for shop-welded structures as mentioned above.

2.3 Material Preparation

2.3.1 Cut edges shall be finished smooth by grinding or machining wherever necessary. Sufficient allowance (3 mm to 5 mm) should be kept in the items in case machining is necessary.

2.3.2 Cutting may be affected by gas cutting, shearing, cropping or sawing. In gas cutting of high tensile steel, special care is to be taken to leave sufficient metal to be removed by machining so that all metal that has been hardened by flame is removed.

2.3.3 Sufficient shrinkage allowance (@ 1mm/M) shall be kept wherever heavy welding is involved.

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

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

2.4 Drilling and punching of holes

2.4.1 Drilling and punching of holes for bolts shall be done as per IS:800:1984, unless otherwise specified by the Owner.

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

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

2.4.4 Permissible deviation in holes for mild steel bolts of normal accuracy and high strength bolts are given in the ANNEXURE-A.

2.5 Assembly for fabrication

2.5.1 Fabrication of all structural steelwork shall be in accordance with IS:800-1984 and in conformity with various clauses of this specification, unless otherwise specified in the drawings.

2.5.2 Fabrication of structures shall preferably be taken up as per the sequence of erection.

2.5.3 All erection units shall bear erection mark no. and reference drg no. at a prominent location on the structures for easy identification at site.

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

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

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

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

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

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

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

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

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

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

2.6 Method of Construction

2.6.1 The size of fillet welds shall not be less than 5mm for load-bearing joints.

2.6.2 Main structural elements shall be welded continuously. Intermittent welds shall be used only on secondary members, which are not exposed to weather or other corrosive influence.

2.6.3 Connections and splices shall be made by welding, or by bolting with appropriate property class. Black bolts shall be used in connections and attachments of secondary members such as purlins, wall girts, etc. Bolts shall be prevented from loosening by means of lock nuts, single coil spring washers or similar devices.

2.6.4 Method of splicing shall be similar to the method of construction adopted for structures. All splices shall be full-strength splice unless exception is specified.

2.6.5 Roof and wall sheets shall be fixed to purlins and wall girts by stainless steel top speed screws with neoprene washers. The connections shall ensure water-tightness into the buildings. The spacing of these screws/bolts shall be sufficient to prevent uplift of sheets by suction. The roof and wall sheets shall be stitched together at their edges by using screws. The end and side overlaps of sheeting shall be sufficient to prevent ingress of rainwater. End lap shall not be less than 75mm and side lap shall not be less than one and half corrugation for GCS sheets. For troughed aluminium sheets manufacturer’s recommendations shall be followed.

2.7 Despatch Instructions

2.7.1 Each despatchable structure shall bear mark no. along with reference drawing number at two prominent locations (e.g. on flange and bottom of base plate of a column).

2.7.2 Control assembly of important structures shall be done in the shop floor before despatch to avoid mismatching. For all such important structures, match marking shall be given at the control assembly stage in the shop floor and such match markings shall be made clearly visible while assembling the structures at site.

2.7.3 Centre lines of column flanges and both sides of web shall be punched, preferably at top and bottom to facilitate alignment after erection.

C. PAINTING OF BUILDING STEEL STRUCTURES

All steel structural work shall be painted as follows unless otherwise stated in the drawing / Technical Specification. Relevant section of the GS shall be referred for further guidelines on painting.

3.1 General

This specification covers the materials, tools, facilities and quality requirement for surface preparation and painting of steel structures, equipment, piping, ducts, chutes, wood work etc.

The complete paint system for any item includes the following basic activities

i. Proper Surface preparation
ii. Applications of Primer Coats
iii. Applications of Finished Coats

All the above coats shall be of quality paint products and of approved make. The scope of work shall also include supply of All paint materials as per Specification described herein.

3.2 Surface Preparation

Surface preparation required for paint application, shall be such as to clean the surface thoroughly y of any material which will be conducive to premature failure of the paint subs t rates.

All surfaces shall be cleaned of loose substances, and foreign materials, such as dirt, rust, scale, oil, grease, welding flux, etc. in order that the prime coat is rigidly anchored to the virgin metal surface. The surface preparation shall confirm to pictorial representation of surface quality grade of Swedish Standards Institution SIS – 055900 or equivalent standards such as SSPC – VIS – 1.67 or DIN 55928(Part 4) or BS 4232 or IS 1477 – 1971 (Part I)

The acceptable surface preparation quality / grade are described under each paint system. The procedures include solvent c leaning, hand tool cleaning, power tool cleaning, blast cleaning, wood surface cleaning, flame cleaning and pickling. This will ensure surface quality as required by the Specific primer paint. For ready reference surface preparation Quality grade to be adopted in respect of SIS 055900 and DIN 55928 (par t -4) is given in Annexure-01.

3.3 Hand Tool Cleaning

The surface shall be cleaned manually by vigorous wire brushing as per grade St -2 quality of Swedish Standard Institution SIS 055900 and DIN 555928. This method effectively removes loosely adherent materials, but would not affect residues of rust or mill scales that are intact are firmly adherent. Finally the surface is to be cleaned with a vacuum cleaner or with clean compressed air or with clean brush. After preparation the Surface shall have a faint metallic shine. The appearance shall correspond to the prints designated St – 2.

3.4 Power Tool Cleaning

The surface shall be cleaned by electric or pneumatic tools, such as brushes, sanding machines, disc abrasive grinder, rotary disc scalar etc. to St – 3 quality. The tools shall be used carefully to prevent excessive roughening of surface and formation of ridges and burrs. This method will remove loosely adherent materials but would not affect residues of rust or mill scales that are firmly adherent and intact.

3.5 Blast Cleaning

The surface shall be cleaned by impingement of abrasive materials, such as graded sand at high velocity created by clean and dry compressed air blast as per the grade according to Swedish Standard Institution SIS 055900.This method will remove loosely adherent materials as well as adherent scales and mill scales. Prior to application of blast, heavy deposit of oil and grease are removed by solvent cleaning excessive surface scales are removed by hand tools or power tool cleaning. The extent of removal of adherent scales is varied, depending on the application and is defined by the surface quality grades Sa1, Sa2, Sa2.5 and Sa3 in the order of increasing cleanliness. The blast c leaning is not recommended for sheet metal work.

3.6 Flame Cleaning

The surface is c leaned by rapid heating by means of oxyacetylene flame to loosen the adherent scales, followed immediately by wire brushing. This method will remove loosely adherent materials as well as most of the adherent scales and mill scales. In order to minimize or prevent distortion flame cutting shall not be used on members having thickness of 6 mm and lower.

3.7 Paint Application

3.7.1 Paints

(i) Paint shall be applied in accordance with paint manufacturer 's recommendations. The work shall generally follow IS 1477 – 1971 (Part II) for jobs carried out in India and SSPC- PA- 1 or DIN 55928 or equivalent for jobs carried out outside India.

(ii) General compatibility between primer and finishing paints shall be established by the paint manufacturer supplying the paints.

(iii) In the event of conflict between this general procedure on painting and the paint manufacturer's specification, the same shall be immediately Brought to the notice of the Purchaser. Generally in cases of such Conflicts, manufacturer's specification / recommendations shall prevail.

(iv) Before buying the paint in bulk, i t is recommended to obtain sample of paint and establish "Control Area of Painting". On Control Area, surface preparation and painting shall be carried out.

(v) If required, samples of paint shall be tested in laboratories to establish quality of paint with respect to:

a) Viscosity
b) Adhesion/Bond of paint in steel surfaces
c) Adhesion/Simulated salt spray test.
d) Chemical analysis (percentage of sol ids by weight)
e) Normal wear resistance as encountered during handling & erection.

f) Resistance against exposure to acid fumes, etc.

(vi) Whole quantity of paint for a particular system of paint shall be obtained from the same manufacturer.

(vii) The main Contractor shall be responsible for supply of paints and this Responsibility shall not be passed on to the sub-contractor

(viii) The painting materials as delivered to the Contractor, must be in the manufacturer's original container bearing thereon manufacturer's name brand and description. Paint /Painting material in containers without labels or with illegible labels shall be rejected, removed from the area and shall not be used.

(ix) Thinners wherever used shall be those recommended by the paint manufacturers and shall be obtained in containers with manufacturer 's name and brand name of thinner legibly printed, failing which the thinner is liable to be rejected and shall not be used.

(x) All paint containers shall be clearly labelled to show the paint identification, date of manufacture, batch number, Special Instruction, Shell life etc, the container shall be opened only at the time of use.

(xi) All paints shall be stored in accordance with the requirements of laid down procedure by the paint manufacturer.

(x) All ingredients in a paint container shall be thoroughly mixed to break –up lumps and disperse pigments before use and during application to maintain homogeneity.

(xi) The make of Paint – SHALIMAR, BERGER, ASIAN PAINTS, ICI or approved by MCL/EPI.

(xii) The colour code of the finishing paint to be followed shall be intimated to the successful Tenderer after finalisation of order. The undercoat shall have different tint to distinguish the same from the finishing coat.

(xiii) The Contractor shall furnish paint manufacturer 's test report or technical data sheet pertaining to the paint selected. The data sheet shall indicate among other things the relevant standards, if any, composition in weight percent of pigments, vehicles, additives drying time, Viscosity spreading rate, flash point , method of application , quality of surface preparation required, corrosion resistance properties and colour shades available.

3.8 General

3.8.1 Each coat of paint shall be continuous, free of pores and of even film thickness without thin spots.

3.8.2 Each coat of paint shall be sufficiently dry before application of next coat.

3.8.3 Paint shall be applied at manufacturer 's recommended rates. The number of coats shall be such that the minimum dry f i lm thickness specified is achieved. The dry film thickness of painted surfaces shall be checked with ELCOMETER of measuring gauges to ensure application of specified DFT.

3.8.4 Zinc rich primer paints which have been exposed several months before finishing coat is applied shall be washed down thoroughly to remove soluble zinc salt deposits.

3.8.5 The machine finished surfaces shall be coated with white lead and tallow before shipment or before being put out into the open air.

3.8.6 Areas which become inaccessible after assemble shall be painted before assembly (after obtaining painting clearance from the inspecting authority) after requisite surface cleaning as specified.

3.8.7 Paint shall not be applied when the ambient temperature is 5 deg C and below or 45 deg C and above. Also paint shall not be applied in rain, wind, fog or at relative humidity of 80 % and above unless the manufacturer 's recommendations permit.

Applications of paint shall be only be spraying or brushing as per IS 486 – 1983 and IS 487 – 1985.

3.8.8 Primer paint shall be applied not later than 2 – 3 hours after preparation of surface, unless specified otherwise.

3.8.9 Edges, corners, crevices, depress ions, joints and welds shall receive special at tent ion to ensure that they receive painting coats of the required thickness.

3.8.10 Surfaces which cannot be painted but require protect ion shall be given a coat of rust inhibitive grease according to IS 958 – 1975 or solvent deposited compound according to IS 1153 – 1975 or IS 1674 – 1960.

3.8.11 Surfaces in contact during shop assembly shall not be painted. Surfaces which will be inaccessible after assembly shall receive minimum two coats of specified primer.

3.8.12 Surfaces to be in contact with wood, brick or other masonry shall be given one shop-coat of the specified primer.

3.9 Site / Field Painting

3.9.1 Wherever shop primer painting is scratched, abraded or damaged, the surface shall be thoroughly cleaned using emery paper and power driven wire brush wherever war ranted, and touched up with corresponding primer. Touching up paint shall be matched and blended to eliminate conspicuous marks.

3.9.2 If more than 50% of the painted surface of an item requires repair, the Entire item shall be mechanically cleaned and new primer coats shall be applied followed by intermediate and finishing coats as per painting specification.

3.9.3 All field welded areas on shop painted items shall be mechanically cleaned (including the weld area proper, adjacent areas contaminated by weld spatter or fumes and areas where existing primer paint is burnt). Subsequently, new primer and finishing coats of paint shall be applied as per painting specification.

3.9.4 The first coat of finish paint at site shall be applied preferable within three months of the shop paint.

3.10 Structural

3.10.1 All fabricated steel structure, fabricated steel pipes, etc. shall have a minimum of two coats of primer paint before dispatch to site.

3.10.2 Parts of steel structures embedded in concrete shall be given a protective coat of Portland cement slurry immediately after fabrication and after surfaces of this part is thoroughly cleaned from grease, rust, mill scales, etc. No paint shall be applied on this part.

3.10.3 All structures shall receive appropriate number of primer and finishing coats in order to achieve over All DFT as per design drawings/ specification.

3.11 Painting Schemes

3.11.1 Legend

SP - Surface preparation quality as per SIS standard
2P1 - Two (2) coats of Primer paint type P1
2F1 - Two (2) coats of Finish paint type F1
DFT - Dry Film Thickness in microns developed
CRT- Clean and Retouch

3.12 PAINT MATERIALS

3.12.1 PRIMER PAINTS (P)

Primer paint products shall be applied only on dry and clean surfaces.

A. Primer Paint – P1 (Phenolic – Alkyd Based)

A single pack air drying phenolic modified alkyd composition with zinc phosphate as a primer paint conforming generally to IS : 2074.

Air drying time	-	About 60 minutes (touch dry)
	-	Overnight (hard dry)
Dry film thickness (DFT)/Coat	-	40 microns (min)
Temperature resistance	-	Upto 100 deg C dry heat

B. **Finish Paints (F)**

Finish paint costs shall be applied over primer coats and intermediate coats after proper cleaning and touch up of primed surface.

C. Finish Paint – F1

A single pack air drying high gloss phenolic alkyd modified synthetic enamel paint suitably pigmented.

Air drying time	-	3 to 4 hours (touch dry)
	-	24 hours (hard dry)
DFT/Coat	-	25 microns (min)
Temperature resistance	-	Upto 100 deg C dry heat
Compatible with	-	Primer P1
		Intermediate I1
Colour	-	Generally all shades

3.12.2 Surface Preparation Grade

Annexure-01

Sl No.	**Surface Preparation**	**Swedish Std. SIS 055900**	**DIN Std. Din 55928 (Part 4)**
1	**Blast cleaning to white metal**	Sa 3	Sa 3

	Removal of all visible rusts, mill-scales, paint and foreign matters.		
2	**<u>Blast cleaning to near white metal</u>**: 95% of any section of surface area is free from all rusts, mill-scales and visible residues.	Sa 2.5	Sa 2.5
3	**<u>Blast cleaning to commercial quality:</u>** At least 2/3 of any section of the surface area is free from all rusts, mill-scales and visible residues.	Sa 2	Sa 2
4	**<u>Brush-off blast cleaning:</u>** Removal of all loose mill-scales, rust and foreign matters etc.	Sa 1	Sa 1
5	**<u>Power tool cleaning:</u>** Very thorough scrapping and wire brushing to remove loose mill-scale, rust and foreign matters to have pronounced metallic shine.	St 3	St 3
6	**<u>Hand tool cleaning:</u>** Removal by hand brushing of loose mill-scale, loose rust and foreign matters.	St 2	St 2

3.12.3 Painting Scheme

Annexure-02

Sl No	Description	Painting Scheme		Total DFT
		At Shop	At Site	
1.0	Steel Structures (Temp. not exceeding 800C)			
	Technological steel structures for plant and equipment Indoor Outdoor	2P1	2F1	130

3.12.4 COLOUR CODE

Annexure-03

Si No	Items Painted	Colour	Colour No.of IS :5
1	Building frames including bracings, side girts, louvers etc.	Aircraft grey	693
2	Crane girders	Azure blue	104
3	Crane stops	Post office red	538
4	Gutters	Black bituminous aluminium	-
5	Fire escape platforms ladders, etc.	Single Red	537
6	General hand railing, top runners	Lemon Yellow	355
7	Rung ladders	Lemon Yellow	355
8	All members blocking passages for Movement	Lemon Yellow	355
9	Trestles, towers and pipe bridges	Dark admiralty grey	632
10	Conveyor gallery structures	Aircraft Grey	693
11	Steel chimneys	Aluminium	-

N.b- Mention colour code is tentative. The final colour code will be decided during execution of work by MCL/CMPDI/EPIL.

D. WELDING SPECIFICATIONS

4.1 General

4.1.1 The welding and welded work shall conform to IS:816 and other relevant codes unless otherwise specified. Electrodes shall conform to IS:814 and shall be approved by the Owner / consultant.

4.1.2 Welding shall be done by Electrical Arc Process. Automatic welding shall be employed for important structures as specified in the drawings. Generally, submersed arc, Automatic & Semi-automatic welding shall be employed. Only where it is not practicable, Manual Arc welding may be resorted to. In case of Manual Arc Welding, recommendations of electrode manufacturer are to be strictly followed

4.1.3 Welding shall not be done under such weather conditions which might adversely affect the efficiency of the welding and where necessary, effective protection and other safeguards shall be provided.

4.1.4 Only qualified welders suitable for the job shall be employed. The Owner / Consultant at his discretion can order periodic tests in accordance with IS:817 of the welders and / or of the welds produced by them at no extra cost. Welding shall be done using requisite jigs and fixtures to avoid distortions or damage to members during / after

welding. Welds on exposed work shall be finished uniformly smooth to present a neat appearance.

4.1.5 The layouts and sequence of operations shall be arranged so as to eliminate distortion and shrinkage stress to the satisfaction of the Inspector. Welding work shall be under constant supervision of competent welding supervisor and shall be done in a properly organized manner with the approved quality welding sets and with automatic welding machines. Detailed welding procedure shall be submitted to the Owner / Consultant and approval of the same shall be obtained before fabrication is commenced.

4.2 Welding Procedure

4.2.1 Welding procedure to be prepared by the Contractor shall include the following :

i) Type and size of electrodes.
ii) Current and arc voltage.(for automatic welding)
iii) Length of run per electrode, or (for automatic welding) speed of travel.
iv) Number and arrangement of runs in multi-run welds.
v) Position of welding.
vi) Preparation and set-up of parts.
vii) Welding sequence.
viii) Pre or, post-heating.
ix) Specification and thickness of steel
x) Welding process (manual arc / submerged arc welding)
xi) Thickness of components meeting at a joint
xii) Pre and post heating requirement
xiii) Weather condition – restrictions thereof xiv) Use of jigs and fixtures
xiv) Type of non-destructive testing to be carried out
xv) Inspection procedure to be followed
xvi) Sequence and process to be followed in different multiple-pass butt welding for different plate thicknesses.

The welding procedure shall be subject to Owner's / Consultant's approval.

4.2.2 The welding procedure shall be arranged to suit the details of the joints as indicated in the drawings and the positions in which the welding is to be carried out. The welds shall meet the requirements of quality specified.

4.2.3 All electrodes for use in the work to which the specification relates shall be kept under dry conditions. Electrodes which are damaged by moisture shall not be used unless it is certified by the manufacturer that when it is properly dried there shall be no detrimental effect. Any electrode which has part of its flux coating broken away or is otherwise damaged shall be discarded.

4.2.4 Low hydrogen electrodes and flux for submerged arc welding shall be dried at 250-300 deg. C for one hour in drying oven before use.

4.2.5 At site, the electrodes shall be kept in proper coves while using them for welding

4.2.6 All metal arc welding shall be as per IS : 9595

4.2.7 Submerged arc welding of mild steel and low alloy steel shall be as per IS : 4353

4.2.8 For multi-run weld deposit the succeeding run shall be done only after the preceding run is cleaned of all slag and flux deposits.

4.2.9 The Contractor shall prepare the edges with an automatically controlled flame cutting torch followed by grinding correctly to the shape, size and dimensions of the groove, prescribed in the design and shop drawings. in case of U-groove joint, the edges

shall be prepared with an automatic flame cutting torch in two passes following a bevel cut with a gouging pass, or by machining.

4.2.10 The welding surfaces shall be smooth, uniform and free from fins, tears, notches or any other defect, which may adversely affect welding. Welding surfaces or the surrounding surfaces within 50 mm of weld shall be free from loose scale, slag, rust, grease, paint, moisture or any other foreign material. Pre-bending of plates for three plate welded sections shall be done where found necessary.

4.2.11 Manipulators may be used where necessary and shall be designed to facilitate welding and to ensure that all welds are easily accessible to the operators. Where full strength butt welds are specified run-on and run-off pieces shall be used. The welding shall be such that the face of weld deposit shall at all places be proud of the surfaces of the parent metal by 1 to 1.5 mm. Where a flush surface is required, the surplus weld metal shall be ground and dressed off.

4.2.12 After completing each run of weld, all slag shall be thoroughly removed, and the surface cleaned before starting the next run of weld. The weld metal, as deposited (including tack welds if to be incorporated) shall be free from cracks, slag, inclusions, gross porosity, cavities and other deposition faults. The weld metal shall be properly fused with the parent metal without serious undercutting or overlapping at the toes of the weld. The surfaces of the weld shall have a uniform and consistent contour and uniform appearance.

4.2.13 All weld runs found defective shall be cut by using either chipping hammer, gouging torch, or suitable grinding wheel in such a manner that adjacent material is not injured in any way. Peeling of the welds involving deformation of the weld surface either during de- slagging or thereafter shall not be allowed.

4.2.14 Arc-strikes on parent surfaces of structures shall be strictly avoided.

4.3 Control in Welding

4.3.1 The extent of quality control in respect of welds for structural elements for both statically and dynamically loaded structures shall be as follows and shall be conducted by the contractor at his own cost:-

A. **Visual Examination** - All welds shall be 100% visually inspected to check the following:

i. Presence of undercuts
ii. Visually identifiable surface cracks in both welds and base metals.
iii. Unfilled craters
iv. Improper weld profile and size
v. Excessive reinforcement in weld
vi. Surface porosity

Before inspection, the surface of weld metal shall be cleaned of all slag, spatter beads, scales etc. by using wire brush or chisel.

B. **Dye Penetration Test (DPT) -** This shall be carried out for all important fillet welds and groove welds for both statically and dynamically loaded structures to check the following

i. Surface cracks
ii. Surface porosities

Dye Penetration Test shall be carried out in accordance with American National Standard ASTME 166.

C. **Ultrasonic- testing:** Ultrasonic test shall be conducted for all groove welds and heat affected zone in dynamically loaded structures and for other important load bearing butt welds in statically loaded structures as desired by Owner, to detect the following

i. Cracks
ii. Lack of fusion
iii. Slag inclusions
iv. Gas porosity

Ultrasonic testing shall be carried out in accordance with American National Standard ANSI/AWS DI.1-96. Before ultrasonic test is carried out, any surface irregularity like undercuts, sharp ridges etc. shall be rectified. Material surface to be used for scanning by probes must allow free movement of probes. For this purpose, surface shall be prepared to make it suitable for carrying out ultrasonic examination.

D. Radiographic Testing (X-ray and & Gamma-Ray Examination)

This test shall be limited to 2% of length of welds for welds made by manual or semi- automatic welding and 1% of length of weld if made by automatic welding machines. The location and extent of the following defects :

i. Gas porosity
ii. Slag inclusions
iii. Lack of penetration
iv. Lack of fusion
v. Cracks

Radiographic testing shall be conducted in accordance with American National Standard ANSI/AWSDI.1-96. Any surface irregularity like undercuts, craters pits etc. shall be removed before conducting radiographic test. The length of weld to be tested shall not be more than 0.75 x focal distance. The width of the radiographic film shall be width of the welded joint plus 20 mm on either side of the weld.

4.3.2 The Contractor shall provide testing equipment for conducting non-destructive tests for confirming the integrity of welding wherever necessary as directed by the Owner / consultant.

4.4 Acceptable Limits of Defects of Weld

Limits of Acceptability of welding defects shall be as follows:

a) Visual inspection & Dye Penetration Test

The limits of acceptability of defects detected during visual inspection and Dye Penetration Test shall be in accordance with American National Standard ANSI/AWS D1.1-96.

b) Ultrasonic Testing - The limits of acceptability of defects detected during ultrasonic testing shall be in accordance with American National Standard ANSI/AWS D1.1-96.

c) Radiographic testing - The limits of acceptability of defects detected during Radiographic testing shall be in accordance with American National Standard ANSI/AWS D1.1-96.

4.4.1 Rectification of Defects in Welds

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

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

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

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

6.1 Inspection Of Structures

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

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

6.1.3 Contractor shall make all necessary arrangements for stage inspection by Owner/Inspector during the fabrication at shop and incorporate all on-the-spot instructions / changes conveyed in writing to the Contractor.

6.1.4 Material improperly detailed or wrongly fabricated shall be reported to the Owner/Inspector and shall be made good as directed. Minor misfits which can be remedied by moderate use of drift pins, and moderate amount of reaming and slight chipping may be corrected in that manner, if in the opinion of the Owner / Inspector the strength or appearance of the structure shall not be adversely affected. In the event the Owner / Inspector directs otherwise, the items shall be rejected and a completely new piece shall be fabricated. The cost of correcting errors shall be to the account of the Contractor.

6.1.5 The Owner / Owner's Inspector shall have the power :

a) To declare, before any structure is submitted for inspection, that the same is not in accordance with the contract, owing to the adoption of any unsatisfactory method of fabrication and the same will be rejected.

b) To reject any structure as not being in accordance with specifications & drawings.

c) To insist that no structure or parts of the structure once rejected is resubmitted for inspection/test, except in cases where the Owner / Inspector authorised representative considers the defects as rectifiable.

6.1.6 If, on rejection of structure by the Owner/Inspector the Contractor fails to make satisfactory progress within the stipulated period, the Owner / Inspector shall be at liberty to cancel the contract and fabricate or authorise the fabrication of the structures at any other place he chooses, at the risk and cost of the Contractor, without prejudice to any action being taken in addition to terms of General Conditions of Contract.

6.1.7 The Owner / Inspector's decision regarding rejection shall be final and binding on the Contractor.

6.1.8 The specifications prescribe various tests at specified intervals for ascertaining the quality of the work done. If the tests prove unsatisfactory, Owner/Inspector shall have liberty to order the Contractor to re-do the work, done in that period and/ or to order such alterations and strengthening that may be necessary at the cost of the Contractor and the contractor shall be bound to carryout such orders failing which the rectification/redoing shall be done by the Owner through other agencies and the cost recovered from the Contractor.

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

6.1.10 All rejected materials shall be removed from the site of fabrication by the Contractor at his own cost and within the time stipulated by the Owner/Inspector.

6 Quality System And Third Party Inspection.

6.1 General

Inspection shall be carried out at the works of the Contractor during fabrication and on final product to ensure conformity of the same with the acceptable criteria of technical specifications, approved fabrication drawings and indicated standards.

This specification is in addition to the provisions laid down in Owner's General Condition of Contract (GCC) and special instructions to Contractor, if any.

6.2 Quality System Requirements.

The Contractor must recognise the importance of quality and follow the defined quality programme in all manufacturing and quality control activities of the product. The Contractor shall define and implement the tasks and controls that shall provide needed assurance in case manufacturing of product is sub-contracted either partly or fully and / or for the procured components of the product. All bought-out components, if any, shall be procured from approved list of vendors issued by the Project Authority.

Owner reserves the right to verify the quality programme and entire product characteristics to assure the intended and specified quality of the product.

6.3 Quality Assurance Plan (QAP)

Approved QAP will be provided later after obtaining approval from MCL/CMPDI.

6.4 Calibration Of Measuring Equipment.

6.4.1 All the measuring equipment used for inspection & testing shall be calibrated and appropriate accuracy class of measuring equipment shall be used. Calibration standards used for calibration of measuring equipment shall be traceable to national standards of National Physical Laboratory (NPL), New Delhi with unbroken chains of comparison

6.4.2 Calibration Certificate of All Measuring Equipments.

Valid calibration certificates for all measuring equipments used during inspection and testing with traceability to national standards of NPL / NPL accredited laboratories shall be furnished along with inspection call prior to undertaking inspection by Owner.

Calibration certificates shall also indicate reference number of calibration standards calibrated by NPL / NPL accredited laboratories and copies of such calibration certificates of calibration standards shall also be furnished when asked for.

6.5 Test Certificates And Documents.

6.5.1 For each of the items being fabricated, the following test certificates and documents, as applicable, in requisite copies including original shall be submitted to Inspection Agency. All test certificates must be endorsed by the Contractor with linkage to project, purchase order and acceptance criteria.

i) Raw materials identification & physical and chemical test certificates for all materials used in fabrication of the component (except IS 2062-1992).
ii) WPS, PQR & WPQ Documents as per applicable code.
iii) Details of stage-wise inspection & rectification records for fabricated items and machined articles.
iv) Control dimension chart with records of alignment, trueness of shape, etc.
v) Details of heat-treatment and stress relieving charts as per specification.
vi) Non-Destructive Test reports as per respective code.
vii) Hardness test certificate.
viii) Performance Test Certificates for all characteristics.
ix) Geometric accuracy and repeatability test reports of machine tools.
x) Surface preparation and painting certificates.
xi) Certificates from competent authority for the items coming under statutory regulations.

6.5.2 The Inspection Agency shall have the right to be present and witness all tests being carried out by the Contractor at their own laboratory or approved laboratories. Also, the Inspection Agency shall reserve the right to call for confirmatory test on samples, at his discretion.

6.6 Manufacturing And Inspection Schedule

The Contractor shall submit the schedule for fabrication and inspection indicating components/ assembly / sub-assembly, date of approval of drawings / data sheets, address of Fabricator with contact person and scheduled date of inspection. Such reports shall be submitted to Owner with a copy to Inspection Coordinating Office once in a month. These monthly reports shall state the planning for next three months. Submission of first report must commence one month prior to commencement of fabrication activities of the component.

6.7 Internal Inspection By Contractor

6.7.1 The Contractor in accordance with approved drawings, T.S., Owner Order, and approved QAP shall carry out inspection and tests. The Contractor shall maintain records of each inspection and test carried out and signed documents shall be submitted to Owner for verification.

6.7.2 The Contractor shall carry out their internal inspection & obtain clearance from statutory bodies e.g. IBR, CCE, TAC, Weights & Measures, safety, IE rules etc. as and where applicable, prior to offering any component for Owner's inspection in accordance with approved QAP.

6.7.3 The Contractor shall ensure use of appropriate calibrated measuring equipment during their internal inspection, as well as, make available the same during Owner's inspection and tests. Also, they shall make necessary arrangement for access and use of Owner owned measuring equipment during inspection.

6.7.4 The Contractor shall identify all the inspected component / raw materials & shall maintain the record of status of inspection viz. inspected & found acceptable, require rectification / rework, rejected etc.

6.7.5 The Contractor shall establish and maintain procedures to ensure that product that does not conform to specified requirements, is prevented from inadvertent use or installation. The description of non-conformity that has been accepted subsequently by Owner by concession and / or of repairs shall be recorded.

Repaired and reworked product shall be offered for re-inspection to Owner along with records of corrective action taken.

6.7.6 The Contractor shall not despatch any equipment till receipt of despatch clearance from Owner.

6.8 Method Of Undertaking Inspection &Testing By Owner.

6.8.1 Agency Responsible:-

Inspection / Waiver of component shall be undertaken by EPI/CMPDI/MCL depending upon the location of manufacturers.

6.8.2 Method of Issuing Inspection Call to EPI/CMPDI/MCL

i) Inspection call shall be given only on readiness of the assembly / sub-assembly and approval of all relevant drawings and QAP. In case assembly sub - assembly offered for inspection are found not ready, all the cost of visit of Owner's personnel shall have to be borne by the Contractor. Also, if the assembly / sub-assembly after inspection found not acceptable, require rework and involve Owner's re-inspection, all the cost of such re-inspections shall also be borne by the Contractor.

ii) Inspection call shall be floated to Owner with ten days clear margin, enclosing all documents like test Certificates, Internal Inspection Reports, Purchase Order, Sub-Purchase Order, T.S., Approved QAP, approved GA drawings/ data sheets and fabrication drawings with a copy of call letter to Inspection Co-ordinating Office. Inspection calls without above documents shall be ignored.

iii) The supplier shall offer substantial quantities for economical inspection consistent with the size of order.

6.9 Obligations Of Contractor

6.9.1 The Contractor shall provide all facilities and ensure full and free access of the Inspection Engineer of Owner to the Contractor's or their Sub-Contractor's premises at any time during contract period, to facilitate him to carry out inspection & testing of the product during or after manufacture of the same.

6.9.2 The Contractor shall delegate a Representative / Co-ordinate to deal with Owner / Consultant on all inspection matters. Also, Contractor's Representative shall be present during all inspection at Sub-Contractor's works.

6.9.3 The Contractor shall comply with instructions of the Inspection Engineer fully and with promptitude.

6.9.4 The Contractor / Sub-Contractor shall provide all instruments, tools, necessary testing & other inspection facilities to Inspection Engineer free of cost for carrying out inspection.

6.9.5 The cost of testing welds by ultrasonic, radiographic and dye penetration tests etc. in the fabrication workshop shall be borne by the Contractor.

6.9.6 The Contractor shall ensure that the assembly / component of the plant and equipment required to be inspected, are not dismantled or despatched before inspection.

6.9.7 The Contractor shall not offer equipment for inspection in painted condition unless otherwise agreed in writing by Owner / Consultant.

6.9.8 The Contractor shall ensure that the equipment and materials once rejected by the Inspection Engineer are not re-used in the manufacture of the plant and equipment. Where parts rejected by the Inspection Engineer have been rectified, as per agreed procedures laid down in advance, such parts shall be segregated for separate inspection and approval, before being used in the work.

6.10 Stamping And Issue Of Inspection Documents.

Inspection Memo: -

For stage inspection & for rejected items / items which do not conform to Technical Specification in one or more quality characteristics requiring rectification / rework, Inspection Memo shall be issued in standard form indicating therein the details of observation & remarks. Fabricator shall indicate all the non-conformities with respect to specification of the product in the Inspection Memo for further control.

Inspection Certificate: -

On satisfactory completion of final inspection & testing by Owner / Third Party Inspector, all accepted material shall be stamped suitably and the Inspection Engineer for the accepted items shall issue Inspection Certificate in standard form.

Inspection Waiver Certificate: -

For the waiver category of items identified in the approved QAP, Owner shall issue Inspection Waiver Certificate after scrutiny of Contractor's Internal Inspection Report, Test Certificates and other Documents as identified in QAP.

6.11General Clauses

6.11.1 Inspection & tests carried out by Owner / Third Party Inspector shall not absolve the responsibility of the Contractor to provide acceptable product nor shall it preclude subsequent rejection and any fault found after inspection/issue of inspection certificate shall not absolve the bidder of its responsibility for correctness of fabricated items and any fault found at later stage shall be rectified by bidder without any extra cost.

6.11.2 Owner / Third Party Inspector reserves the right to inspect any product at any stage of manufacturing without prior notice to Contractor beyond pre-identified stages & hold points of approved QAP.

6.12 Permissible Deviation In Assembly Of Welded Joints

A) SQUARE BUTT-JOINT
- a) Gap between the ends of plates : + 1.0 mm
- b) Stepping of one plate over the other : + 1.0 mm

B) SINGLE VEE-GROOVE JOINT
- a) Bevel angle : + 5 deg
- b) Gap between two plates : + 1.0 mm
- c) Stepping of one plate over the other : + 2.0 mm
- d) Root thickness : + 1.0 mm

C) LAP JOINT
- a) Over lap : + 5.0 mm
- b) Gap between the surfaces : + 1.0 mm

D) TEE FILLET JOINT
- a) Gap between the edge of the web and the surface of the flange : + 2.0 mm

E) DOUBLE VEE-GROOVE JOINT
- a) Stepping of plate over one another : + 2.0 mm
- b) Deviation in value of root thickness : + 1.0 mm
- c) Deviation in bevel angle : + 1.0 mm
- d) Deviation in value of gap : + 1.0 mm

6.13 Inclusion In Price

6.13.1 No idle labour payment and idle plant & machinery payment will be given to bidder under any circumstances.

6.13.2 Bidder price shall include all costs of plant & machinery, tools and tackles, consumables etc. including their insurance, safety, security etc. that may be necessary to complete the work in all respect in time.

6.13.3 Bidder price shall all include all costs of manpower (i.e engineers, supervisors and labours) including their accommodation, communication, conveyance, Sanitary facilities, first aid, medical, safety PPE, incidental expenses, safety, security etc. required to complete work in all respect in time.

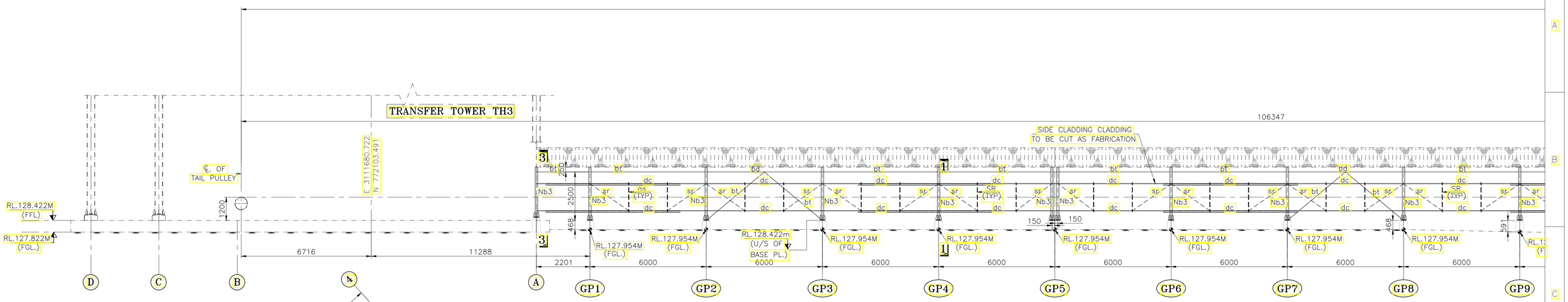
6.13.4 Rectifications, if any due to fault of bidder, shall be done by bidder immediately within the Defect Liability Period. If the bidder fails to carry out required rectification on account of fault of bidder, EPI at its discretion may get the job done and debit the same to the bidder.

6.13.5 Bidder has to carry out all kind of Punch List Work identified by EPI/MCL to the fullest satisfaction of them.

E. GENERAL SPECIFICATIONS

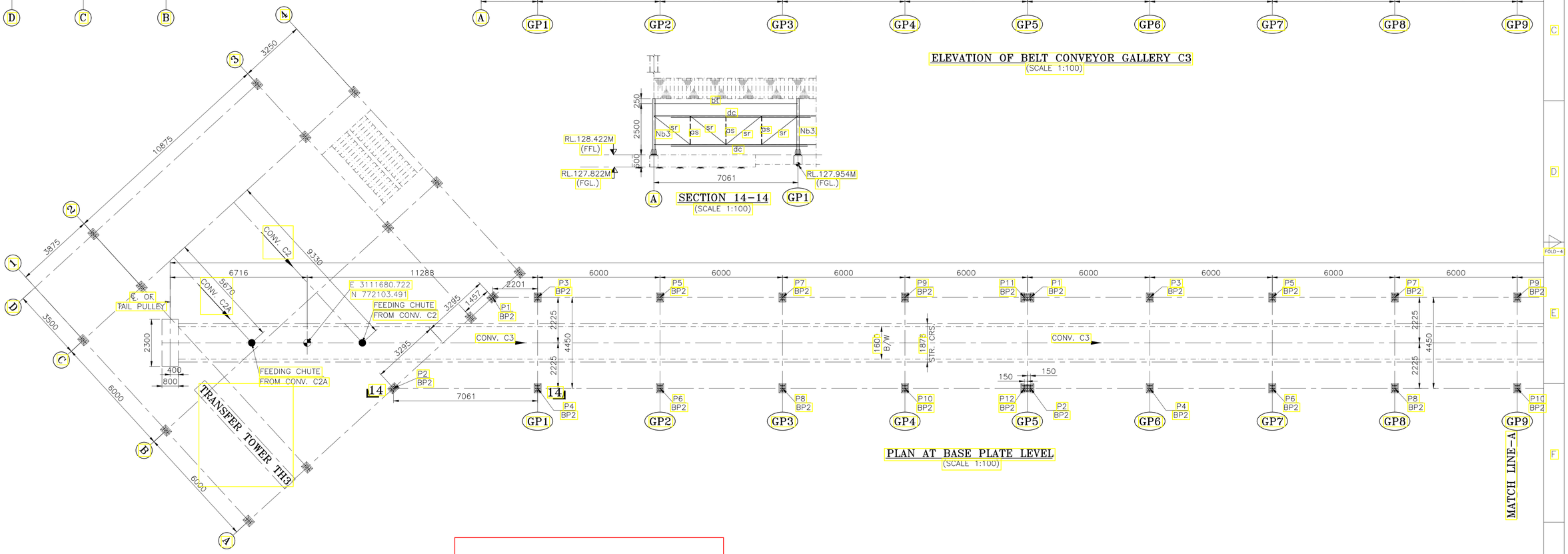
Providing, Fabrication, Sand Blasting & Painting of structures.

1. The **Welder Qualification Test** is mandatory for all welders. Only qualified welders shall be allowed to work. All welding shall be as per IS 823 USING Approved Electrodes of ESAB, ADOR, D&H or approved by MCL/EPI.
2. **All welding shall be conforming to IS : 814** for Mild Steel Structures using Electrode no. E6013 and E7018 .For E7018 Electrodes, use baking / holding/ carrying oven as per the standard guideline of welding. Rectifier Set shall do welding of the plates more than 10mm thickness.
3. **All holes in the structural steel sections** shall be made by proper drilling and no holes by gas cutting shall be allowed during Erection work at site.
4. **All sharp edges of the fabricated structures** shall be made smooth by proper grinding so that while handling of the same, any untoward incident can be avoided.
5. **Before painting, proper surface preparation** by blasting/ wire brushing / emery paper etc. is required as per painting specification.
6. **All surfaces of the structural fabricated items** shall be dry cleaned in order to remove any dirt, grease, oil etc. by Wire Brushing, Scraping and sand Blasting before application of Primer.
7. Approved Make for Structural Steel: SAIL / TISCO / RINL / JINDAL



ELEVATION OF BELT CONVEYOR GALLERY C3
(SCALE 1:100)

SECTION 14-14
(SCALE 1:100)



PLAN AT BASE PLATE LEVEL
(SCALE 1:100)

FOR TENDER PURPOSE ONLY

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO..M001-S-013(SH-1,3 TO 8)

DWG NO.	DESCRIPTION
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

R E F E R E N C E S

S T A N D A R D N O T E S

1. ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER.
2. ALL FILLET WELDS SHALL BE 6 MM THK. UNLESS OTHERWISE NOTED.
3. ALL HOLES ARE 17.5 ø FOR 16 ø BOLTS UNLESS OTHERWISE NOTED.
4. ALL VERTICAL GUSSETS ARE 10 MM THICK & HORIZONTAL GUSSETS ARE 8mm THICK UNLESS OTHERWISE NOTED
5. HOLES FOR ERECTION BOLTS SHOWN THUS.
6. HOLES FOR PERMANENT BOLTS SHOWN THUS.
7. ALL STEEL SHALL CONFORM TO IS:2062
8. READ THIS DRAWING IN CUNJUNCTION WITH OTHER DRAWING OF SAME DRAWING NUMBER
9. FOR STD GALLERY DETAIL REFER DWG NO. M001-S-071 (SHT-1 OF 10)
10. ALL BOLTS SHALL BE OF 8.8 GRADE
11. HANDRAIL SHALL BE PAINTED AS PER SPECIFICATIONS.
12. ALL SAG ROD SHALL BE MS ROUND BAR WITH DOUBLE NUTS AT EACH END.
13. SIDE & ROOF CLADDING
    0.5 MM THK PRECOATED GALVANIZED IRON PROFILE SHEET WITH EVERY 8th SHEET (12.5% OF AREA) OF 2 MM THK. FRP/GRP TRANSLUSENT SHEET.

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CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR-48, GURGAON, HARYANA-122018

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	13.01.23	ISSUED FOR APPROVAL	S	VIKR.	DD

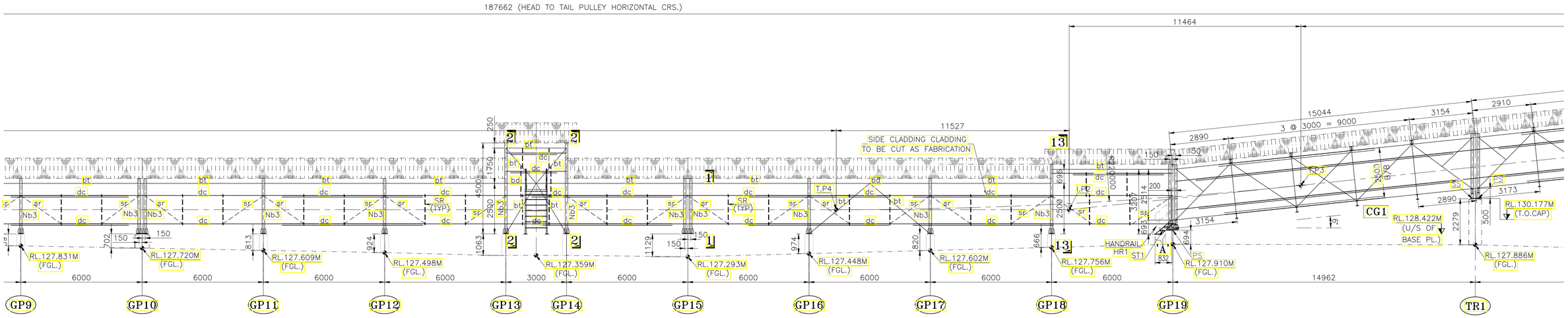
R E V I S I O N H I S T O R Y

	BY	NAME	SIGN	RELEASED FOR
DESIGNED		VIKRAM		APPROVAL
DRAWN		SONU		SHEET SIZE A1
CHECKED		MS		
APPROVED		DD		SCALE 1:1
DATE		13.01.23		

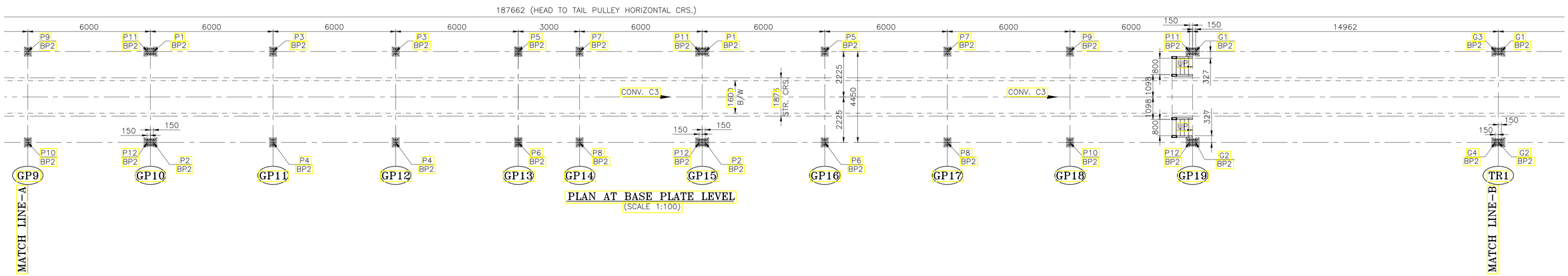
PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL — MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND IT'S TRESTLE

DWG. NO. M001-S-013 | SHEET 2 OF 8 | REV 0



ELEVATION OF BELT CONVEYOR GALLERY C3
(SCALE 1:100)



PLAN AT BASE PLATE LEVEL
(SCALE 1:100)

FOR TENDER PURPOSE ONLY

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO..M001-S-013(SH-1,2,4 TO 8)

DWG NO.	REFERENCES
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

STANDARD NOTES

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    0.5 MM THK PRECOATED GALVANIZED IRON PROFILE SHEET WITH EVERY 8th SHEET (12.5% OF AREA) OF 2 MM THK. FRP/GRP TRANSLUSENT SHEET.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	13.01.23	ISSUED FOR APPROVAL	S	VIKR.	DD

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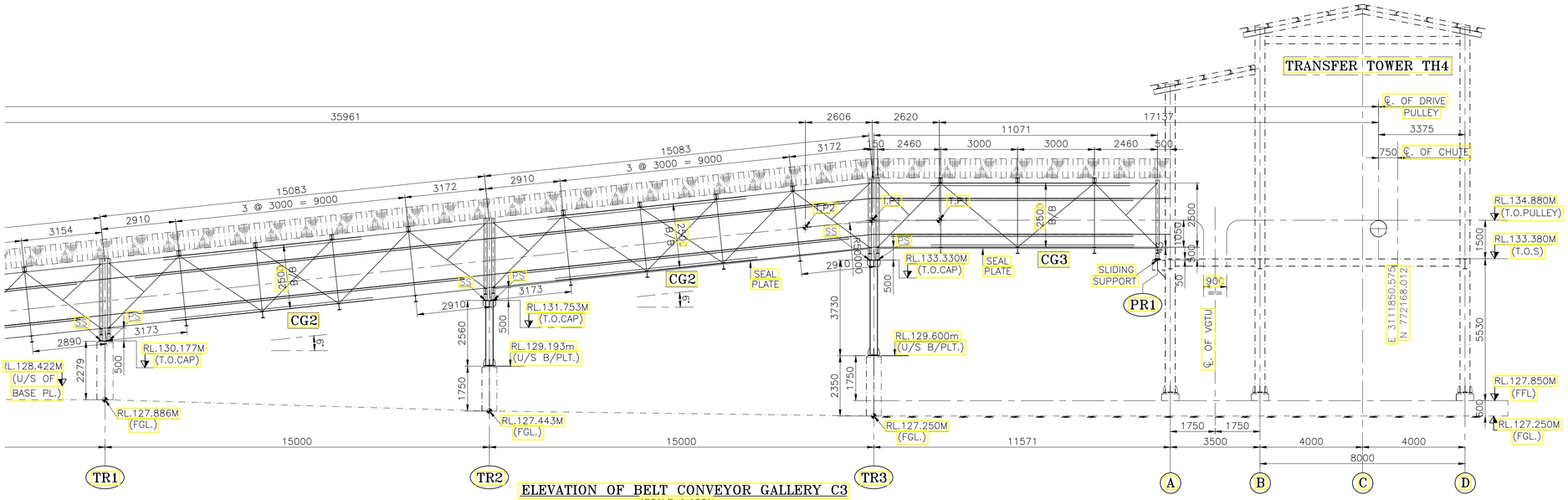
CONTRACTOR'S DESIGN CONSULTANT
LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR-48, GURGAON, HARYANA-122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

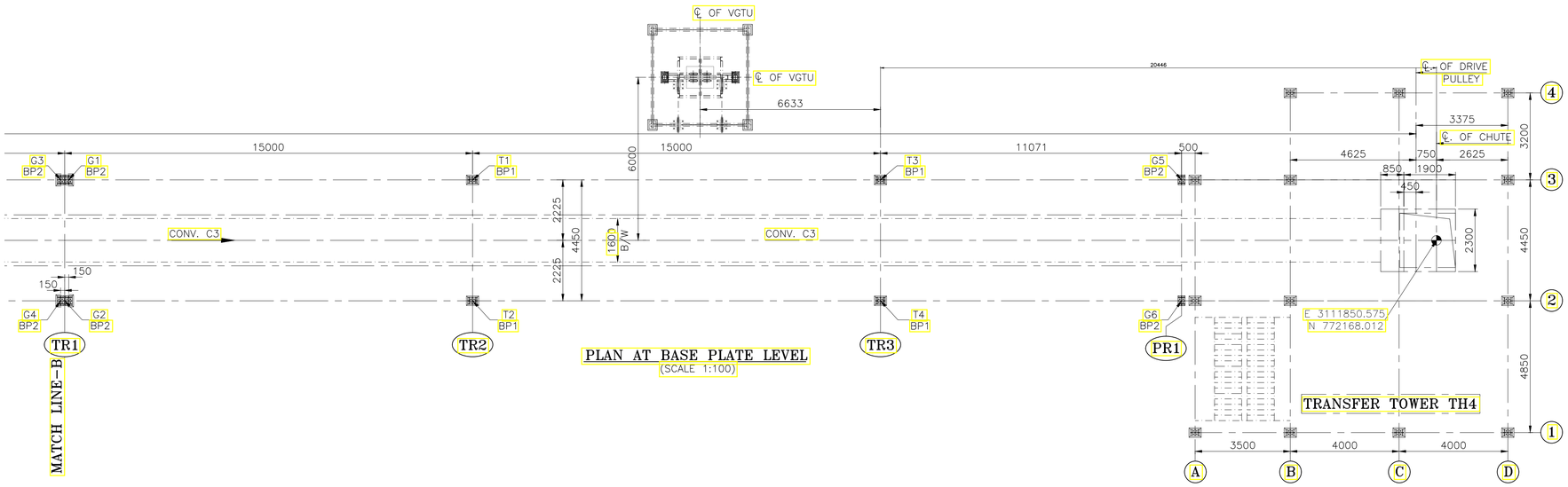
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE
CHECKED	MS		A1
APPROVED	DD		SCALE
DATE	13.01.23		1:1

TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND IT'S TRESTLE

DWG. NO. M001-S-013 | SHEET 3 OF 8 | REV 0



ELEVATION OF BELT CONVEYOR GALLERY C3
(SCALE 1:100)



PLAN AT BASE PLATE LEVEL
(SCALE 1:100)

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DWG NO.	DESCRIPTION
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

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DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE
CHECKED	MS		A1
APPROVED	DD		SCALE
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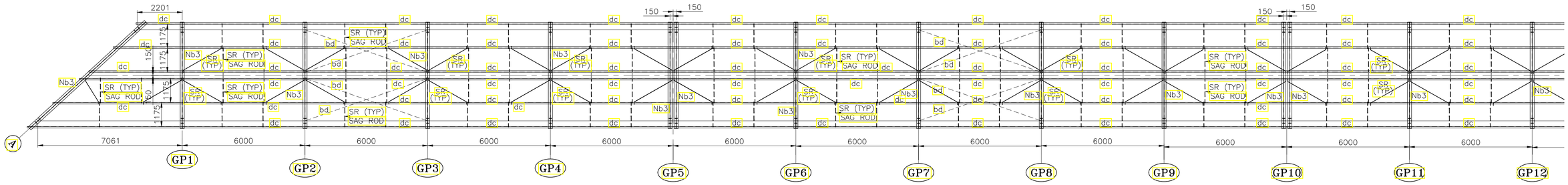
TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND IT'S TRESTLE

DWG. NO. M001-S-013 | SHEET 4 OF 8 | REV 0



PLAN AT RAFTER LEVEL
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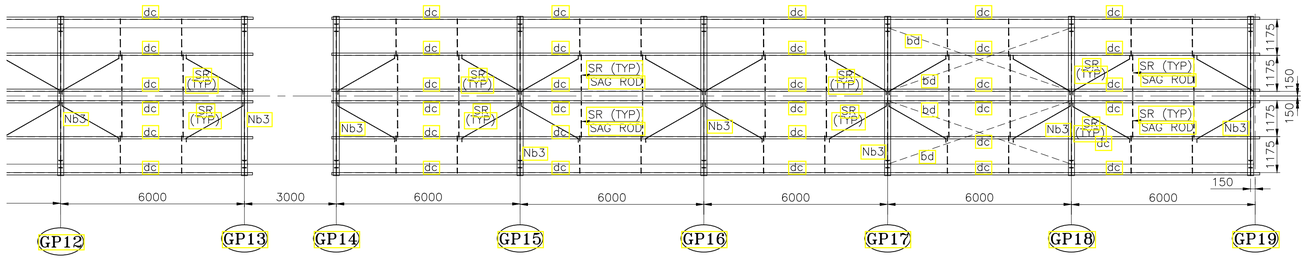

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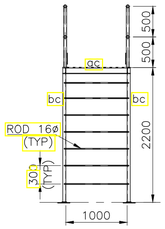

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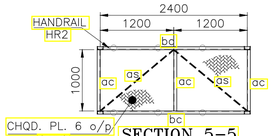

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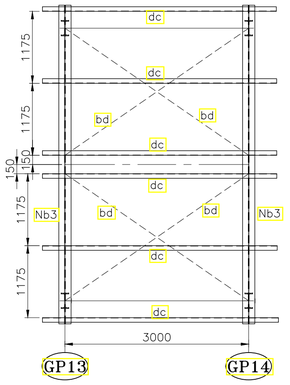

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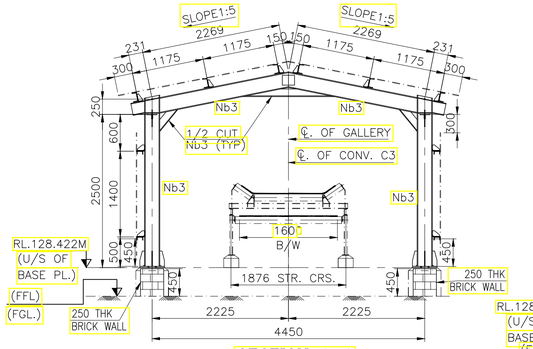

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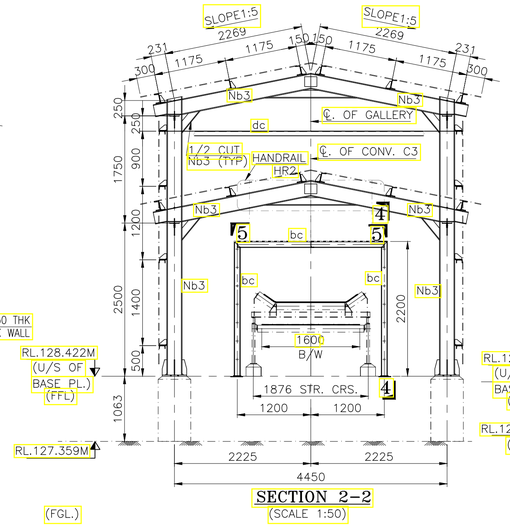

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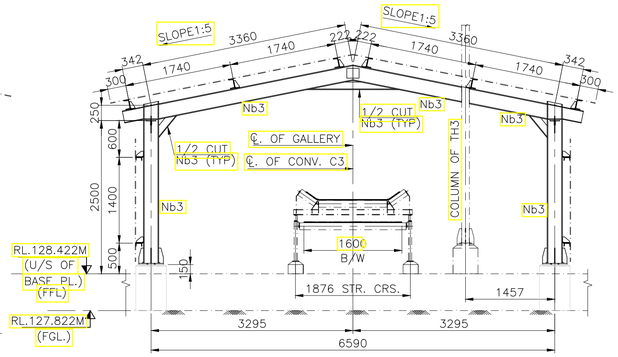
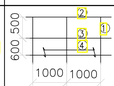
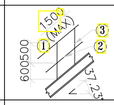
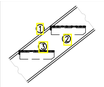


SECTION 3-3
(SCALE 1:50)

TABLE OF MEMBER FOR GALLERY & TRESTLE

SECTION MARKED	MARK	PROFILE	SECTION	FORCES (T)	REMARKS
GALLERY TRESTLE	as	⌐	L50x50x6		ALL GUSSET PLATE = 8 THK.
	ad	⊤	2/L50x50x6		
	bd	⊤	2/L65x65x6		
	bs	⌐	L 65x65x6		
	bt	┼	2/L65x65x6		
	cs	⌐	L 75x75x6		
	ed	⊤	2/L90x90x8		
	fd	⊤	2/L100x100x8		
	ac	[	ISMC 75		
	bc	[	ISMC 100		
	cc	[	ISMC 125		
	dc	[	ISMC 150		
	Nb2	I	NPB 250x125x30.11		
	SR	|	SAG ROD ø16		
	Mb	I	ISMB 250		
	Nb3	I	NPB 250x150x39.78		

TABLE OF MEMBERS FOR STAIR & HANDRAIL

MKD. NO	PROFILE	SECTION	FORCES (T)	REMARKS
HR-2		① PIPE NB32 (M) ② PIPE NB32 (M) ③ PIPE NB32 (M) ④ PL.100x6THK.	–	
HR-1		① PIPE NB32 (M) ② PIPE NB32 (M) ③ PIPE NB32 (M)	–	
ST-1		① ISMC 200 ② L 50x50x6 ③ GRATING 25 THK.	–	

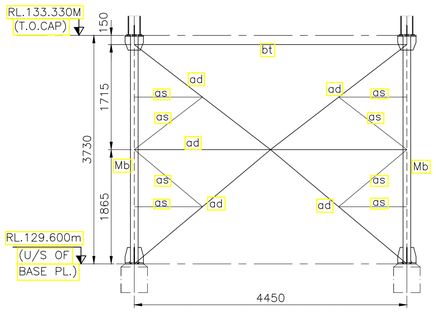


DIAGRAM OF TRESTLE TR-3
(SCALE 1:50)

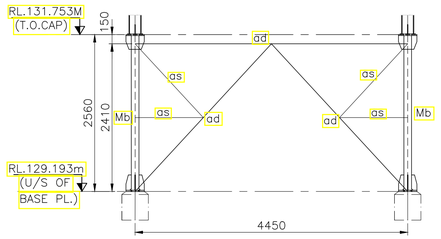


DIAGRAM OF TRESTLE TR-2
(SCALE 1:50)

FOR TENDER PURPOSE ONLY

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO..M001-S-013(SH-1 TO 4 & 6 TO 8)

DWG NO.	DESCRIPTION
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER.
2. ALL FILLET WELDS SHALL BE 6 MM THK. UNLESS OTHERWISE NOTED.
3. ALL HOLES ARE 17.5 ø FOR 16 ø BOLTS UNLESS OTHERWISE NOTED.
4. ALL VERTICAL GUSSETS ARE 10 MM THICK & HORIZONTAL GUSSETS ARE 8mm THICK UNLESS OTHERWISE NOTED
5. HOLES FOR ERECTION BOLTS SHOWN THUS.
6. HOLES FOR PERMANENT BOLTS SHOWN THUS.
7. ALL STEEL SHALL CONFORM TO IS:2062
8. READ THIS DRAWING IN CUNJUNCTION WITH OTHER DRAWING OF SAME DRAWING NUMBER
9. FOR STD GALLERY DETAIL REFER DWG NO. M001-S-071 (SHT-1 OF 10)
10. ALL BOLTS SHALL BE OF 8.8 GRADE
11. HANDRAIL SHALL BE PAINTED AS PER SPECIFICATIONS.
12. ALL SAG ROD SHALL BE MS ROUND BAR WITH DOUBLE NUTS AT EACH END.
13. SIDE & ROOF CLADDING
    0.5 MM THK PRECOATED GALVANIZED IRON PROFILE SHEET WITH EVERY 8th SHEET (12.5% OF AREA) OF 2 MM THK. FRP/GRP TRANSLUSENT SHEET.
14. 450 GUARD WALL SHALL BE PROVIDED FOR GROUND CONVEYOR

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	13.01.23	ISSUED FOR APPROVAL	S	VIKR.	DD

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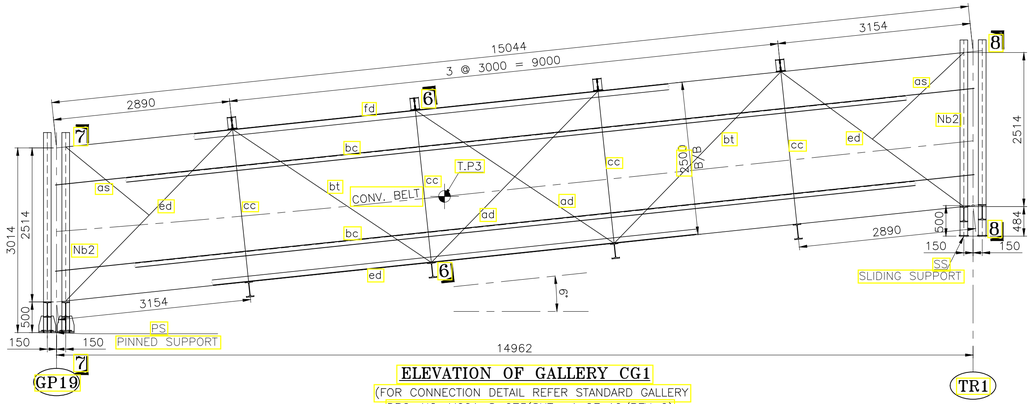
CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD SECTOR-48, GURGAON, HARYANA-122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE
CHECKED	MS		A1
APPROVED	DD		SCALE
DATE	13.01.23		1:1

TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND IT'S TRESTLE

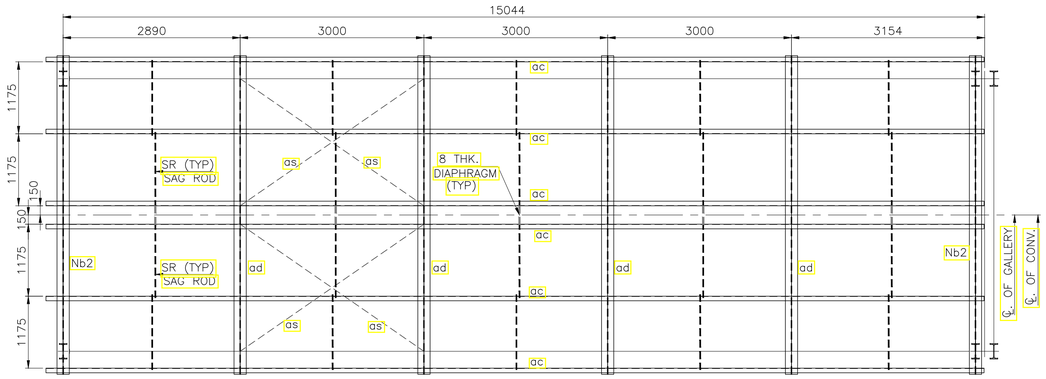
DWG. NO. M001-S-013 | SHEET 5 OF 8 | REV 0



ELEVATION OF GALLERY CG1

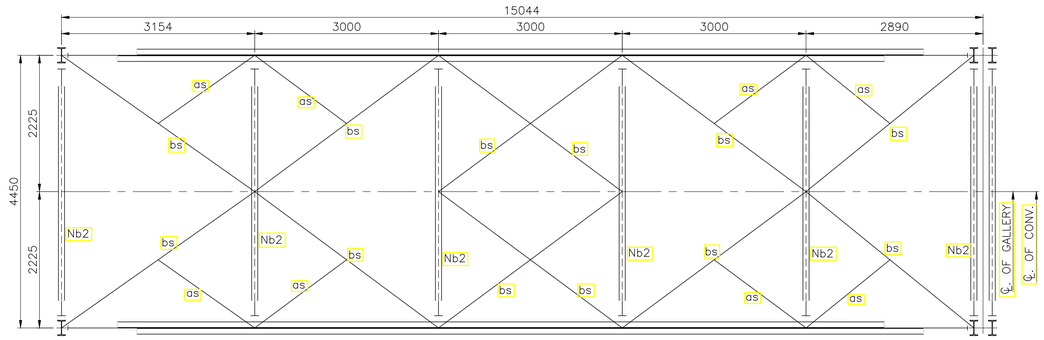
(FOR CONNECTION DETAIL REFER STANDARD GALLERY DRG. NO...M001-S-073(SHT- 1 OF 10/REV-0))

(SCALE 1:50)



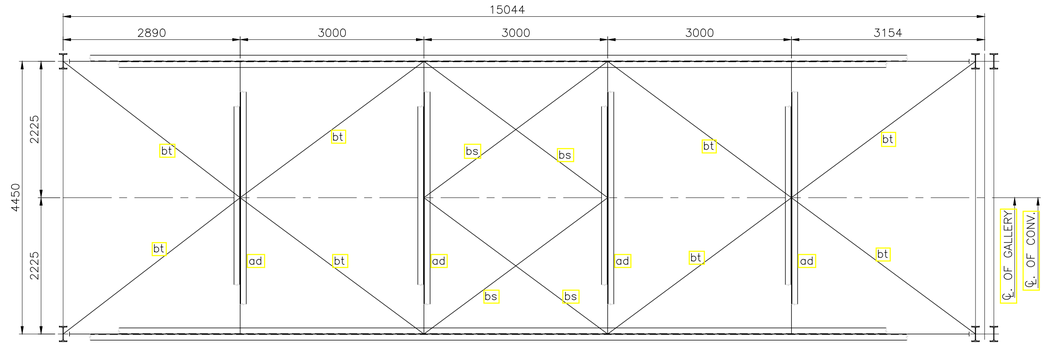
PLAN AT RAFTER LEVEL

(SCALE 1:50)



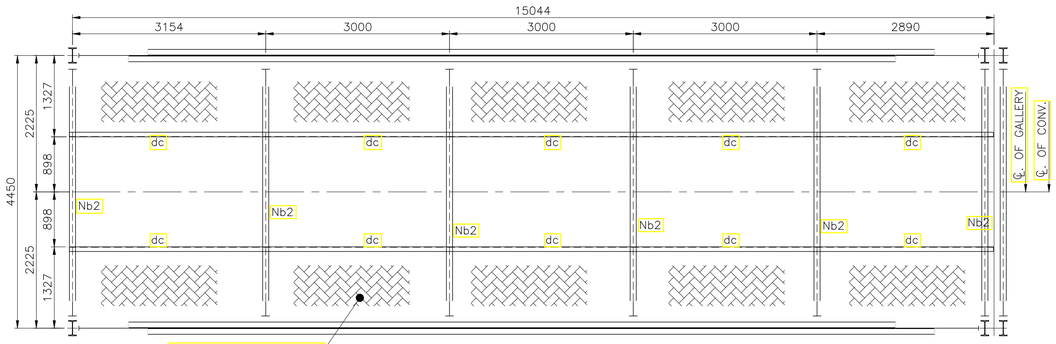
PLAN AT BOTTOM CHORD LEVEL

(SCALE 1:50)



PLAN AT TOP CHORD LEVEL

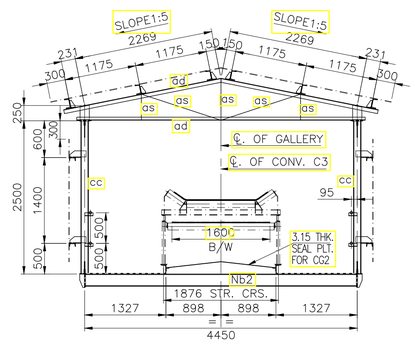
(SCALE 1:50)



6 O/P CHEQD. PLT. WITH 50x6 @750 FOR SPAN >600 & 1500mm (TYP)

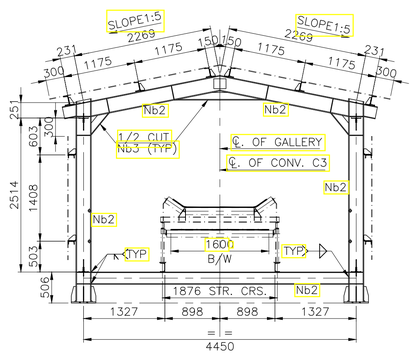
PLAN AT WALKWAY LEVEL

(SCALE 1:50)



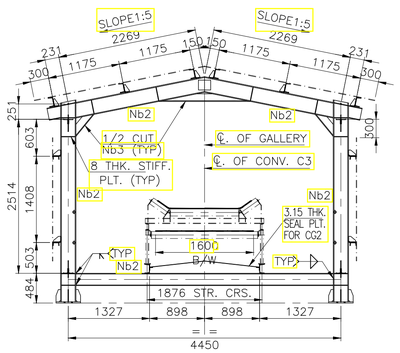
SECTION 6-6

(SCALE 1:50)



SECTION 7-7

(SCALE 1:50)



SECTION 8-8

(SCALE 1:50)

FOR TENDER PURPOSE ONLY

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO..M001-S-013(SH-1 TO 5 & 7,8)

DWG NO.	DESCRIPTION
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

R E F E R E N C E S

S T A N D A R D N O T E S

1. ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER.
2. ALL FILLET WELDS SHALL BE 6 MM THK. UNLESS OTHERWISE NOTED.
3. ALL HOLES ARE 17.5 ø FOR 16 ø BOLTS UNLESS OTHERWISE NOTED.
4. ALL VERTICAL GUSSETS ARE 10 MM THICK & HORIZONTAL GUSSETS ARE 8mm THICK UNLESS OTHERWISE NOTED
5. HOLES FOR ERECTION BOLTS SHOWN THUS.
6. HOLES FOR PERMANENT BOLTS SHOWN THUS.
7. ALL STEEL SHALL CONFORM TO IS:2062.
8. READ THIS DRAWING IN CUNJUNCTION WITH OTHER DRAWING OF SAME DRAWING NUMBER
9. FOR STD GALLERY DETAIL REFER DWG NO. M001-S-071 (SHT-1 OF 10)
10. ALL BOLTS SHALL BE OF 8.8 GRADE
11. HANDRAIL SHALL BE PAINTED AS PER SPECIFICATIONS.
12. ALL SAG ROD SHALL BE MS ROUND BAR WITH DOUBLE NUTS AT EACH END.
13. SIDE & ROOF CLADDING 0.5 MM THK PRECOATED GALVANIZED IRON PROFILE SHEET WITH EVERY 8th SHEET (12.5% OF AREA) OF 2 MM THK. FRP/GRP TRANSLUSENT SHEET.

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CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD SECTOR-48, GURGAON, HARYANA-122018

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	13.01.23	ISSUED FOR APPROVAL	S	VIKR.	DD

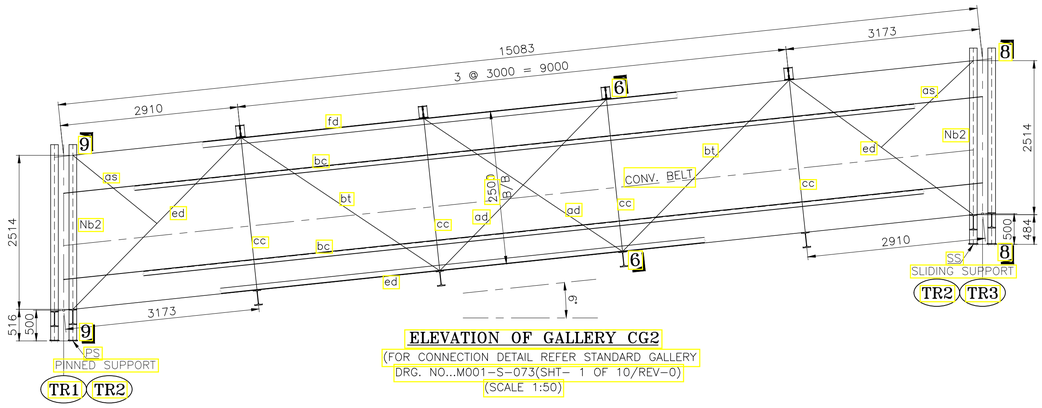
R E V I S I O N H I S T O R Y

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

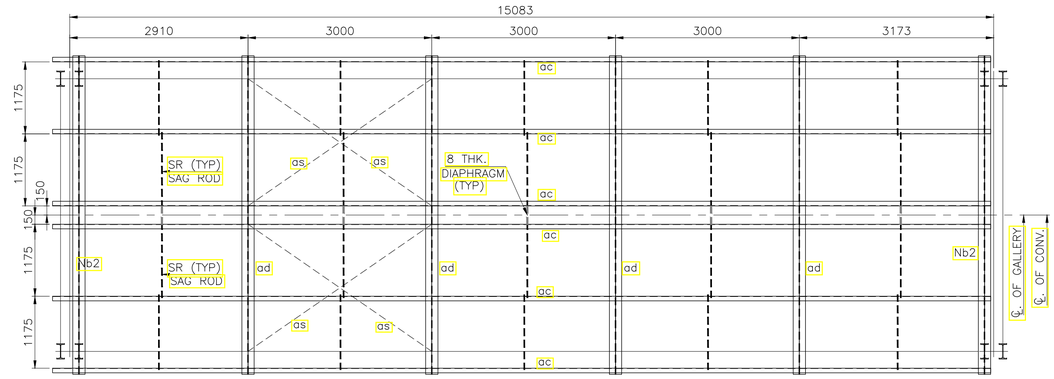
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE
CHECKED	MS		A1
APPROVED	DD		SCALE
DATE	13.01.23		1:1

TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND IT'S TRESTLE

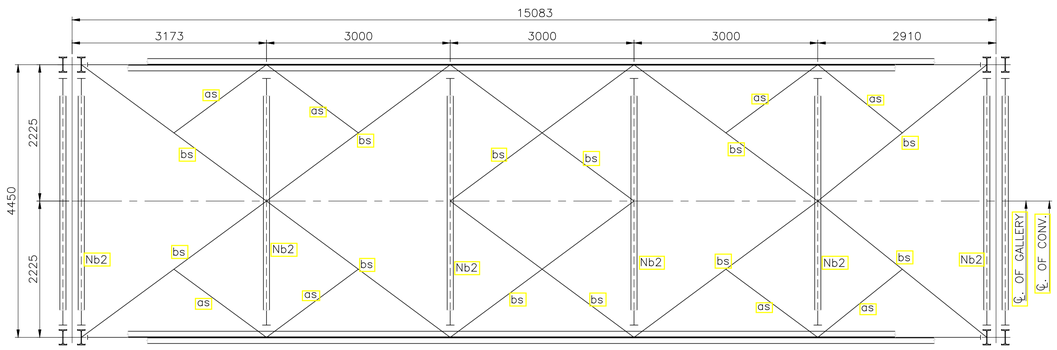
DWG. NO. M001-S-013 | SHEET 6 OF 8 | REV 0



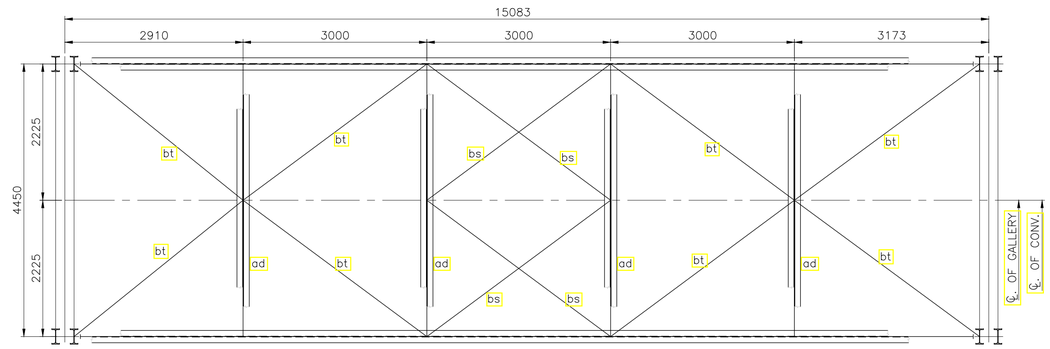
ELEVATION OF GALLERY CG2
(FOR CONNECTION DETAIL REFER STANDARD GALLERY DRG. NO...M001-S-073(SHT- 1 OF 10/REV-0)
(SCALE 1:50)



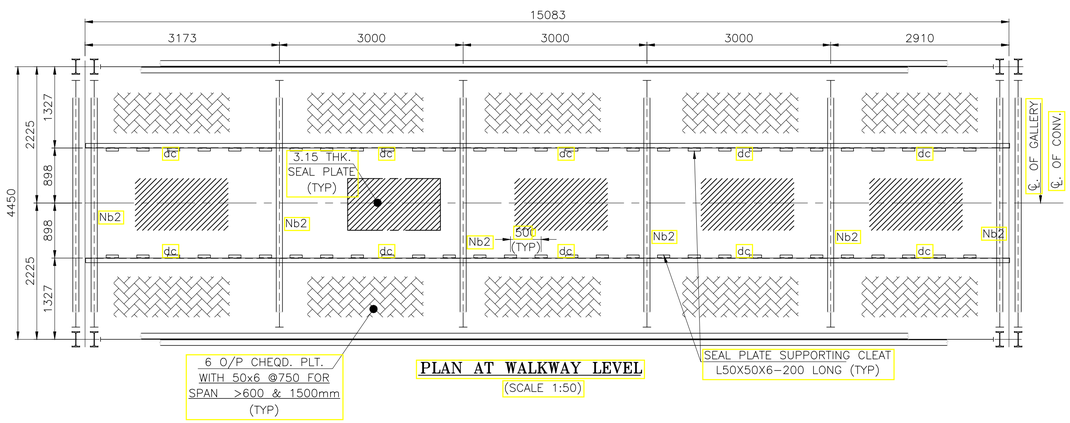
PLAN AT RAFTER LEVEL
(SCALE 1:50)



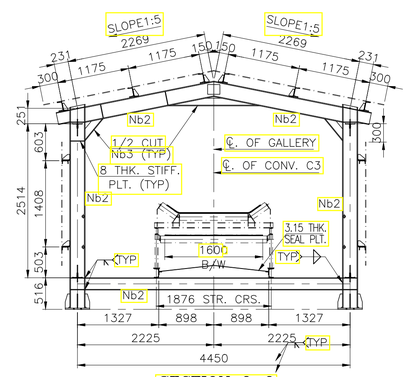
PLAN AT BOTTOM CHORD LEVEL
(SCALE 1:50)



PLAN AT TOP CHORD LEVEL
(SCALE 1:50)



PLAN AT WALKWAY LEVEL
(SCALE 1:50)



SECTION 9-9
(SCALE 1:50)

FOR TENDER PURPOSE ONLY

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO..M001-S-013(SH-1 TO 6 & 8)

DWG NO.	DESCRIPTION
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER.
2. ALL FILLET WELDS SHALL BE 6 MM THK. UNLESS OTHERWISE NOTED.
3. ALL HOLES ARE 17.5 ø FOR 16 ø BOLTS UNLESS OTHERWISE NOTED.
4. ALL VERTICAL GUSSETS ARE 10 MM THICK & HORIZONTAL GUSSETS ARE 8mm THICK UNLESS OTHERWISE NOTED
5. HOLES FOR ERECTION BOLTS SHOWN THUS.
6. HOLES FOR PERMANENT BOLTS SHOWN THUS.
7. ALL STEEL SHALL CONFORM TO IS:2062
8. READ THIS DRAWING IN CUNJUNCTION WITH OTHER DRAWING OF SAME DRAWING NUMBER
9. FOR STD GALLERY DETAIL REFER DWG NO. M001-S-071 (SHT-1 OF 10)
10. ALL BOLTS SHALL BE OF 8.8 GRADE
11. HANDRAIL SHALL BE PAINTED AS PER SPECIFICATIONS.
12. ALL SAG ROD SHALL BE MS ROUND BAR WITH DOUBLE NUTS AT EACH END.
13. SIDE & ROOF CLADDING
    0.5 MM THK PRECOATED GALVANIZED IRON PROFILE SHEET WITH EVERY 8th SHEET (12.5% OF AREA) OF 2 MM THK. FRP/GRP TRANSLUSENT SHEET.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	13.01.23	ISSUED FOR APPROVAL	S	VIKR.	DD

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CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD SECTOR-48, GURGAON, HARYANA-122018

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE
CHECKED	MS		A1
APPROVED	DD		SCALE
DATE	13.01.23		1:1

PROJECT: COAL HANDLING PLANT (10 MTY) HINGULA OCP

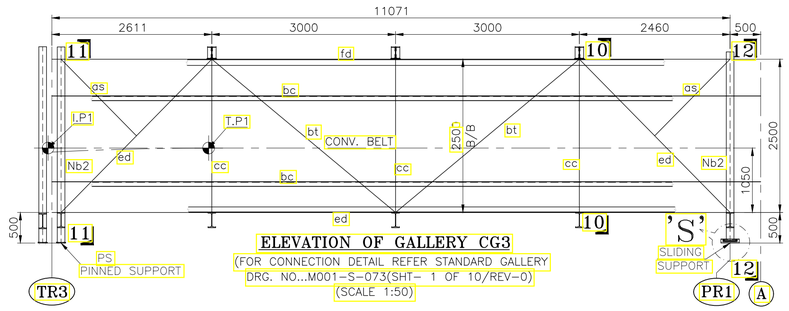
CLIENT: MCL — MAHANADI COALFIELDS LIMITED

CONSULTANT: CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013

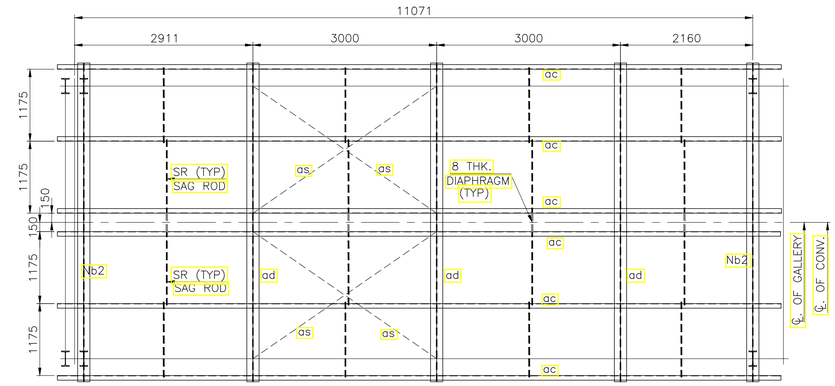
CONTRACTOR: ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND IT'S TRESTLE

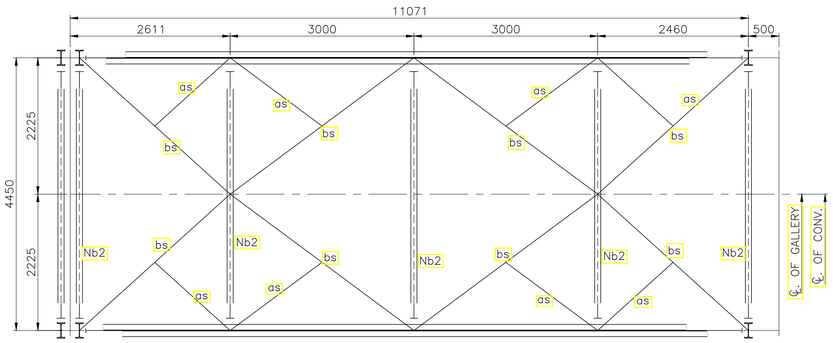
DWG. NO. M001-S-013 | SHEET 7 OF 8 | REV 0



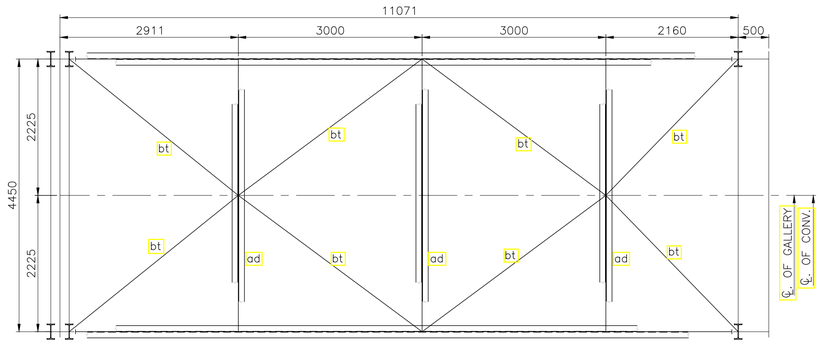
ELEVATION OF GALLERY CG3
(FOR CONNECTION DETAIL REFER STANDARD GALLERY DRG. NO...M001-S-073(SHT- 1 OF 10/REV-0)
(SCALE 1:50)



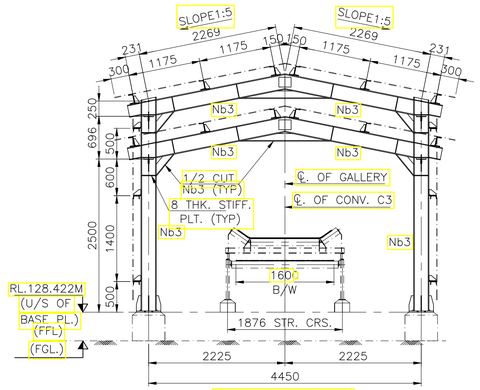
PLAN AT RAFTER LEVEL
(SCALE 1:50)



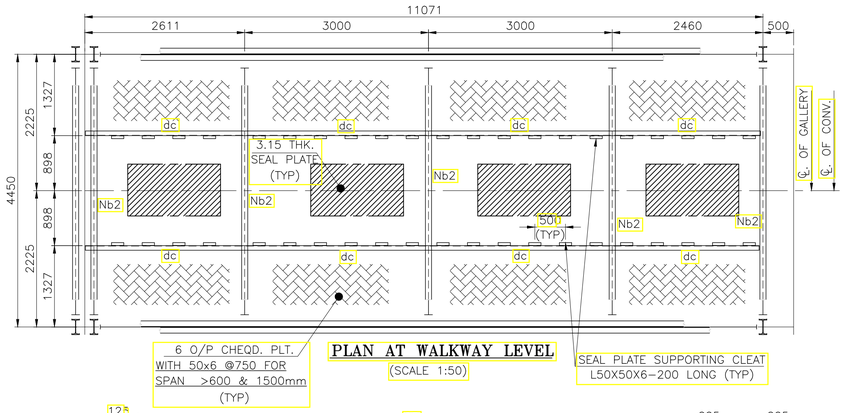
PLAN AT BOTTOM CHORD LEVEL
(SCALE 1:50)



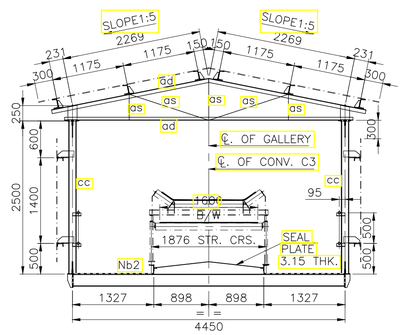
PLAN AT TOP CHORD LEVEL
(SCALE 1:50)



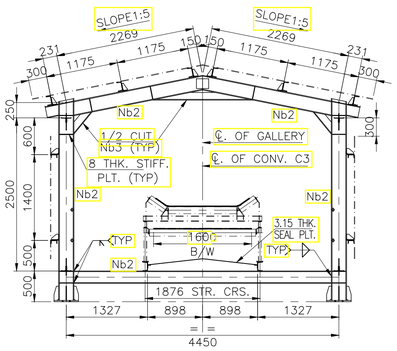
SECTION 13-13
(SCALE 1:50)



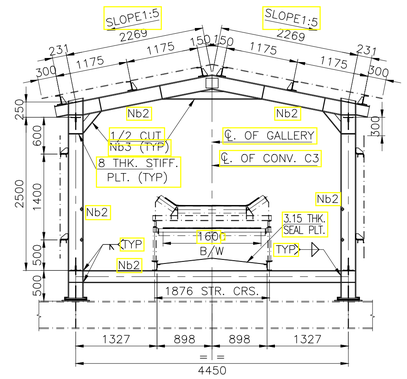
PLAN AT WALKWAY LEVEL
(SCALE 1:50)



SECTION 10-10
(SCALE 1:50)



SECTION 11-11
(SCALE 1:50)



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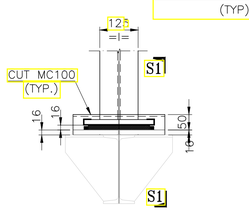
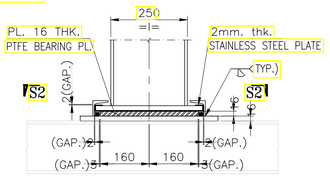
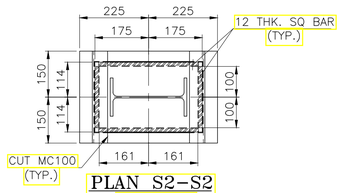


DETAIL-'S'
(SCALE 1:10)



SECTION S1-S1
(SCALE 1:10)



PLAN S2-S2
(SCALE 1:10)

FOR TENDER PURPOSE ONLY

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO..M001-S-013(SH-1 TO 7)

DWG NO.	DESCRIPTION
M001-M-005	GENERAL ARRANGEMENT OF BELT CONVEYOR SYSTEM (C3)

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER.
2. ALL FILLET WELDS SHALL BE 6 MM THK. UNLESS OTHERWISE NOTED.
3. ALL HOLES ARE 17.5 ø FOR 16 ø BOLTS UNLESS OTHERWISE NOTED.
4. ALL VERTICAL GUSSETS ARE 10 MM THICK & HORIZONTAL GUSSETS ARE 8mm THICK UNLESS OTHERWISE NOTED.
5. HOLES FOR ERECTION BOLTS SHOWN THUS.
6. HOLES FOR PERMANENT BOLTS SHOWN THUS.
7. ALL STEEL SHALL CONFORM TO IS:2062
8. READ THIS DRAWING IN CUNJUNCTION WITH OTHER DRAWING OF SAME DRAWING NUMBER
9. FOR STD GALLERY DETAIL REFER DWG NO. M001-S-071 (SHT-1 OF 10)
10. ALL BOLTS SHALL BE OF 8.8 GRADE
11. HANDRAIL SHALL BE PAINTED AS PER SPECIFICATIONS.
12. ALL SAG ROD SHALL BE MS ROUND BAR WITH DOUBLE NUTS AT EACH END.
13. SIDE & ROOF CLADDING
0.5 MM THK PRECOATED GALVANIZED IRON PROFILE SHEET WITH EVERY 8th SHEET (12.5% OF AREA) OF 2 MM THK. FRP/GRP TRANSLUSENT SHEET.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	13.01.23	ISSUED FOR APPROVAL	S	VIKR.	DD

CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD SECTOR-48, GURGAON, HARYANA-122018

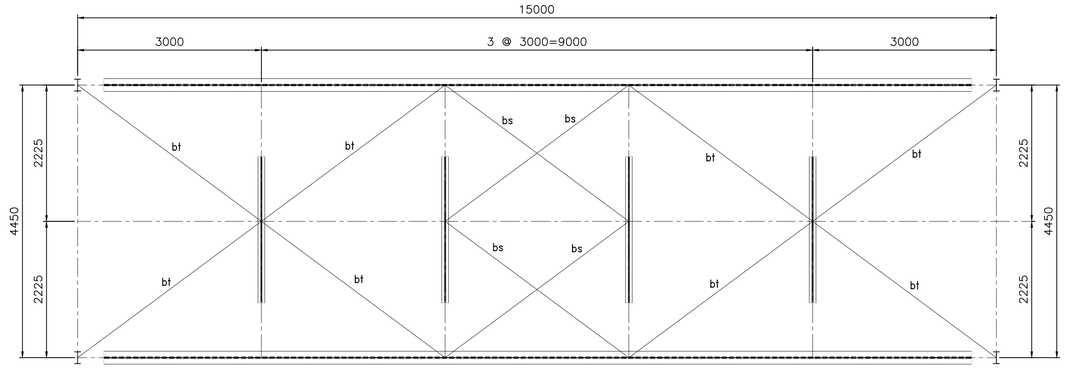
CONTENTS OF THIS SHEET IS OUR COPYRIGHT PROPERTY. THE UNAUTHORISED USE OF THIS DOCUMENT OF USE OR CONTRARY TO ITS INTENDED PURPOSE IS NOT PERMITTED AND SHALL BE PREDECUTED

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

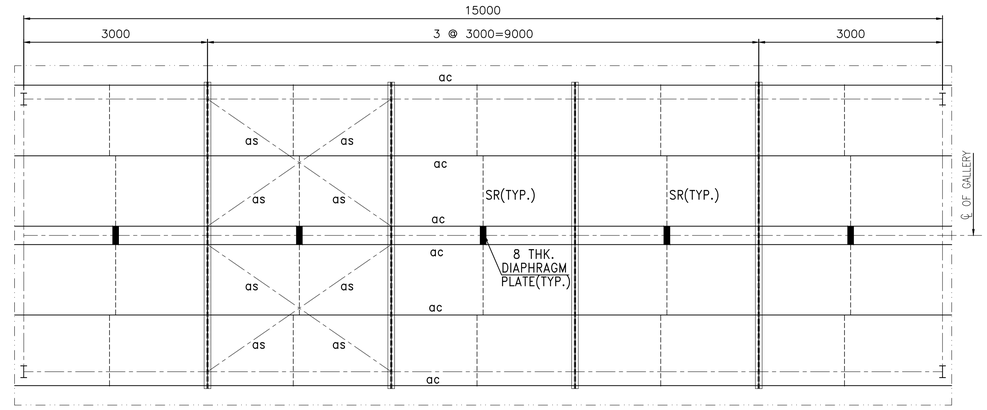
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE
CHECKED	MS		A1
APPROVED	DD		SCALE
DATE	13.01.23		1:1

TITLE: BELT CONVEYOR C3
GA DRAWING OF CONVEYOR C3 AND AND IT'S TRESTLE

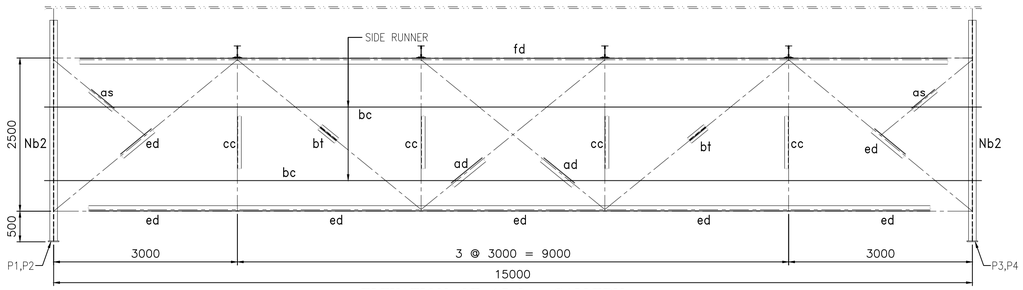
DWG. NO. M001-S-013 | SHEET 8 OF 8 | REV 0



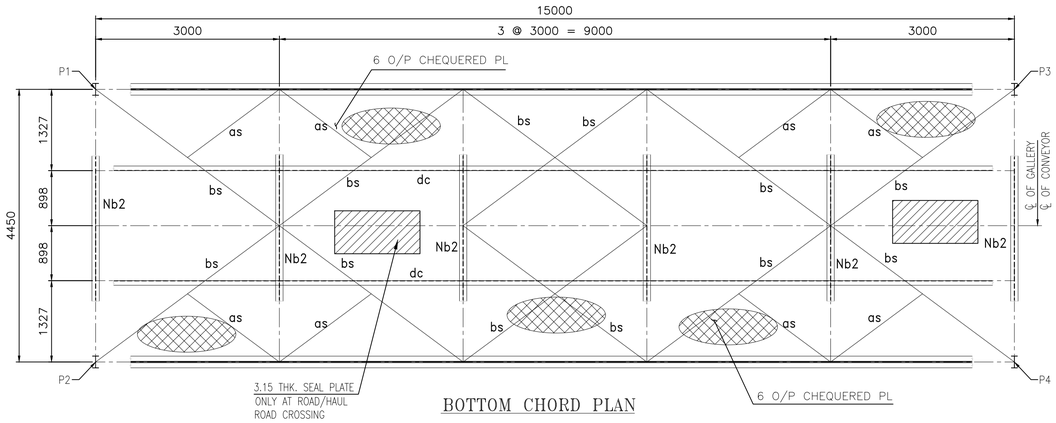
TOP CHORD PLAN



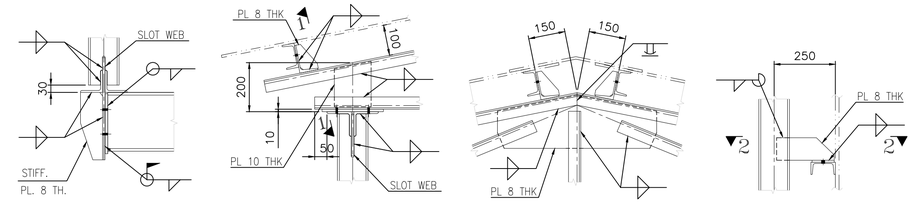
RAFTER PLAN



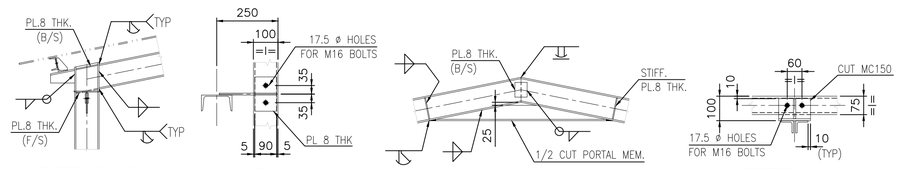
ELEVATION OF 15.0m GALLERY



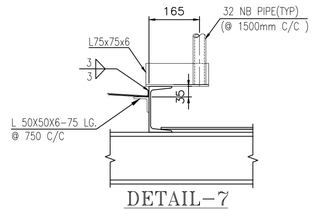
BOTTOM CHORD PLAN



DETAIL 1 DETAIL 2 DETAIL 3 DETAIL 4



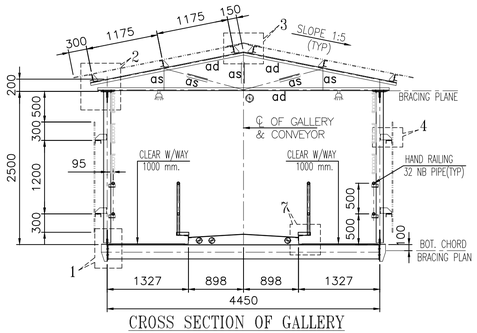
DETAIL 5 VIEW 2–2 DETAIL 6 VIEW 1–1



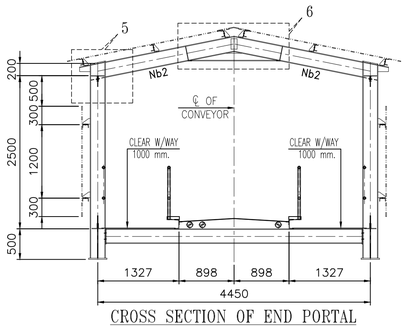
DETAIL–7

MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
ad	⊤ 50x50x6
bs	L 65x65x6
bt	⊤ 65x65x6
cs	L 75x75x6
ed	⊤ 90x90x8
fd	⊤ 100x100x8
ac	MC 75
bc	MC 100
cc	MC 125
dc	MC 150
Nb2	NPB 250x125x30.11
SR	SAG ROD 16ø
ALL GUSSET PLATE = 8 THK.	

FOR TENDER PURPOSE ONLY



CROSS SECTION OF GALLERY



CROSS SECTION OF END PORTAL GALLERY

SUPPORT REACTION IN kN

Load Case	Support Node - 1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	43.4	2.3	0.0	43.4	-2.3	0.0	43.4	2.3	0.0	43.4	-2.3
LL	0.1	87.9	2.9	-0.1	87.4	-2.9	0.0	87.9	2.9	0.0	87.4	-2.9
WL(+XP)	0.0	-28.7	0.6	0.0	-28.7	-0.6	0.0	-21.4	-0.2	0.0	-21.4	0.2
WL(+XS)	0.0	-8.6	0.7	0.0	-8.6	-0.7	0.0	-1.4	-0.1	0.0	-1.4	0.1
WL(-XP)	0.0	-21.4	-0.2	0.0	-21.4	0.2	0.0	-28.7	0.6	0.0	-28.7	-0.6
WL(-XS)	0.0	-1.4	-0.1	0.0	-1.4	0.1	0.0	-8.6	0.7	0.0	-8.6	-0.7
WL(+ZP)	-0.3	-33.2	-9.8	0.3	-14.7	-12.1	0.0	-33.2	-9.7	0.0	-14.7	-12.0
WL(+ZS)	-0.3	-13.2	-9.7	0.3	5.4	-12.2	0.0	-13.1	-9.6	0.0	5.4	-12.2
WL(-ZP)	0.3	-14.7	12.1	-0.3	-33.2	9.8	0.0	-14.7	12.0	0.0	-33.2	9.7
WL(-ZS)	0.3	5.4	12.2	-0.3	-13.2	9.7	0.0	5.4	12.2	0.0	-13.1	9.6

+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

DWG NO.	DESCRIPTION
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M001–M–001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502–1994
9. SEAL PLATES SHALL CONFORM TO IS:1079–1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
–	–	–	–	–	–
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0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

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CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER–A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR–48, GURGAON, HARYANA–122018

PROJECT: COAL HANDLING PLANT (10 MTY) HINGULA OCP

CLIENT: MCL MAHANADI COALFIELDS LIMITED

CONSULTANT: CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR–751013

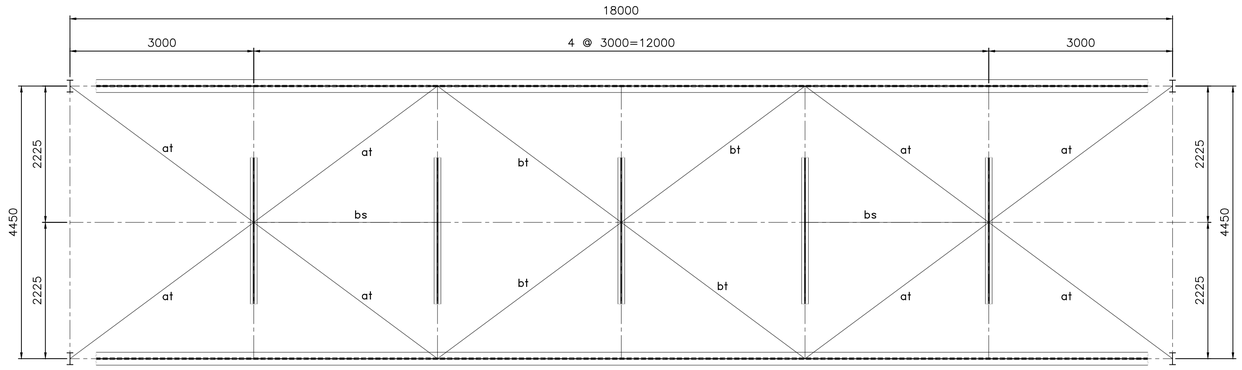
CONTRACTOR: ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02–01–23		

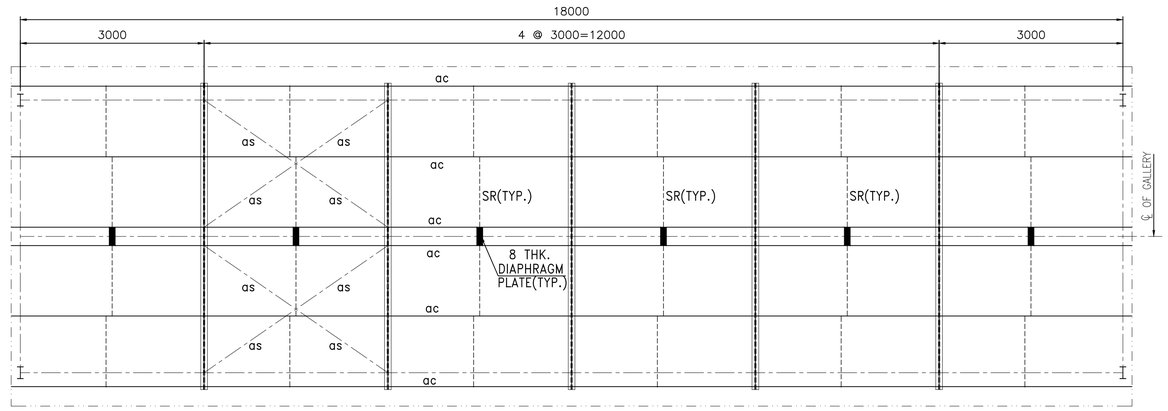
TITLE: STRUCTURAL GA FOR STANDARD GALLERY 15.0m LONG 4.45m WIDE

DWG. NO. M001–S–073

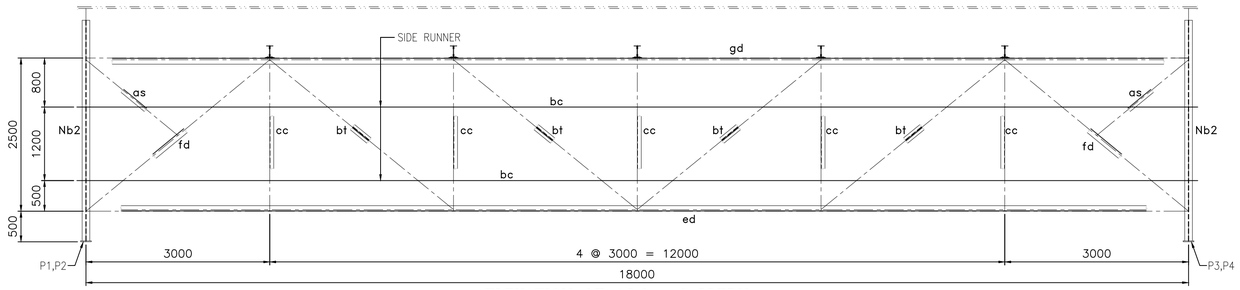
SHEET	REV
1 OF 10	0



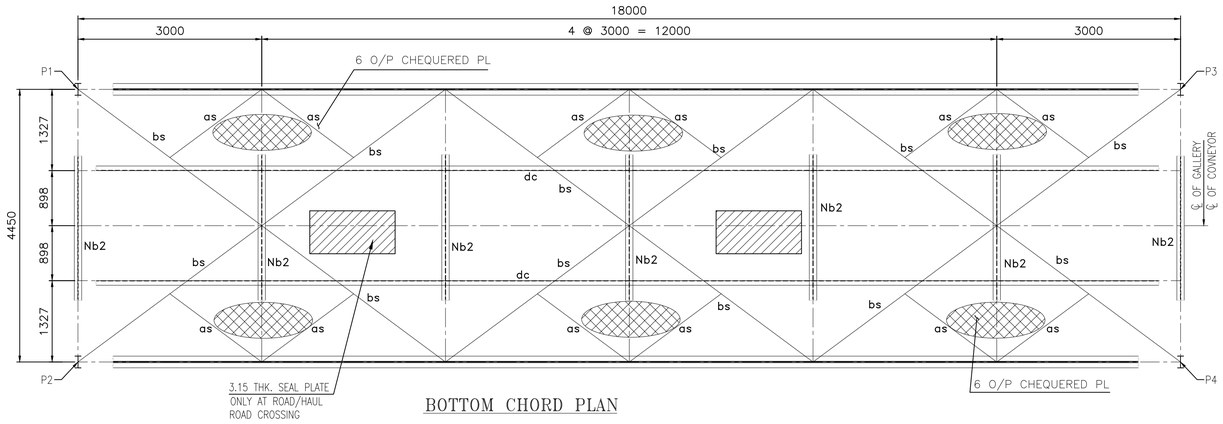
TOP CHORD PLAN



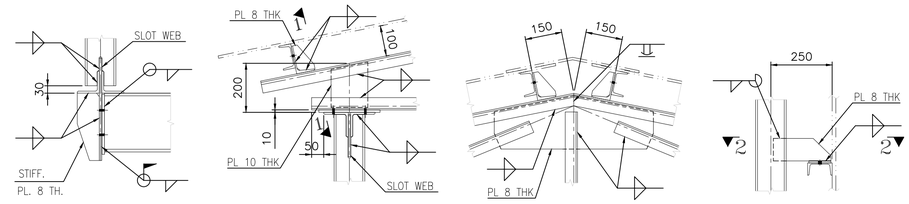
RAFTER PLAN



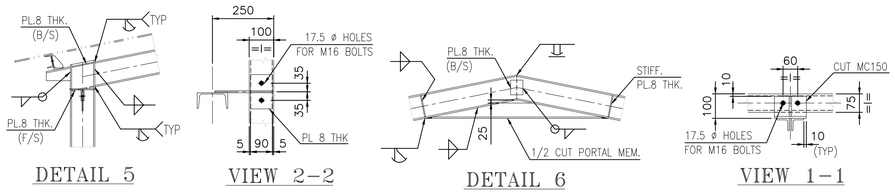
ELEVATION OF 18.0m GALLERY



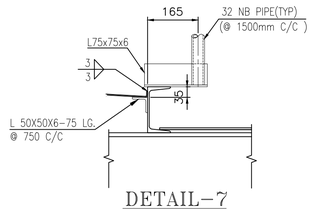
BOTTOM CHORD PLAN



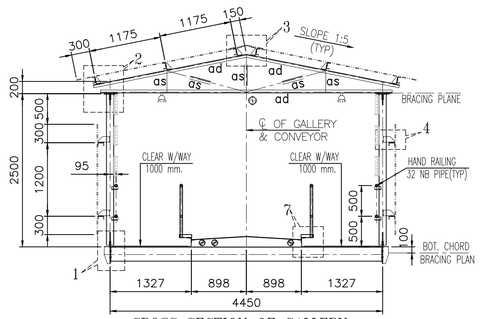
DETAIL 1 DETAIL 2 DETAIL 3 DETAIL 4



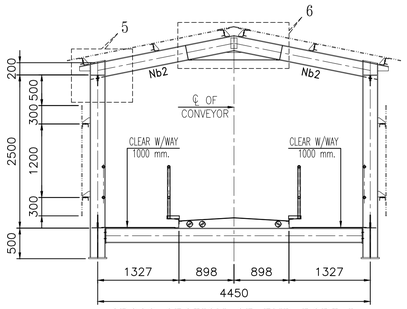
DETAIL 5 VIEW 2–2 DETAIL 6 VIEW 1–1



DETAIL–7



CROSS SECTION OF GALLERY



CROSS SECTION OF END PORTAL GALLERY

SUPPORT REACTION IN kN

Load Case	Support Node - 1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	51.8	2.2	0.0	51.8	-2.2	0.0	51.8	2.2	0.0	51.8	-2.2
LL	0.1	105.4	2.7	-0.1	104.9	-2.7	0.0	105.4	2.7	0.0	104.9	-2.7
WL(+XP)	0.0	-35.6	0.8	0.0	-35.6	-0.8	0.0	-27.2	0.0	0.0	-27.2	0.0
WL(+XS)	0.0	-11.6	0.8	0.0	-11.6	-0.8	0.0	-3.2	0.1	0.0	-3.2	-0.1
WL(-XP)	0.0	-24.5	-0.1	0.0	-24.5	0.1	0.0	-32.8	0.7	0.0	-32.8	-0.7
WL(-XS)	0.0	-0.4	-0.1	0.0	-0.4	0.1	0.0	-8.8	0.8	0.0	-8.8	-0.8
WL(+ZP)	-0.5	-39.9	-11.8	0.5	-17.6	-14.5	0.0	-39.8	-11.7	0.0	-17.7	-14.4
WL(+ZS)	-0.5	-15.8	-11.8	0.5	6.5	-14.5	0.0	-15.7	-11.7	0.0	6.4	-14.4
WL(-ZP)	0.5	-17.6	14.5	-0.5	-39.9	11.8	0.0	-17.7	14.4	0.0	-39.8	11.7
WL(-ZS)	0.5	6.5	14.5	-0.5	-15.8	11.8	0.0	6.4	14.4	0.0	-15.7	11.7

+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
ad	⊤ 50x50x6
at	⊥ 50x50x6
bs	L 65x65x6
bt	⊥ 65x65x6
ed	⊤ 90x90x8
fd	⊤ 100x100x8
gd	⊤ 100x100x10
ac	MC 75
bc	MC 100
cc	MC 125
dc	MC 150
Nb2	NPB 250x125x30.11
SR	SAG ROD 16ø
ALL GUSSET PLATE = 8 THK.	

FOR TENDER PURPOSE ONLY

DWG NO.	DESCRIPTION
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M001–M–001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502–1994
9. SEAL PLATES SHALL CONFORM TO IS:1079–1994 (SEMI KILLED QUALITY)
10. ALL SAC RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

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CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER–A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR–48, GURGAON, HARYANA–122018

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
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0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

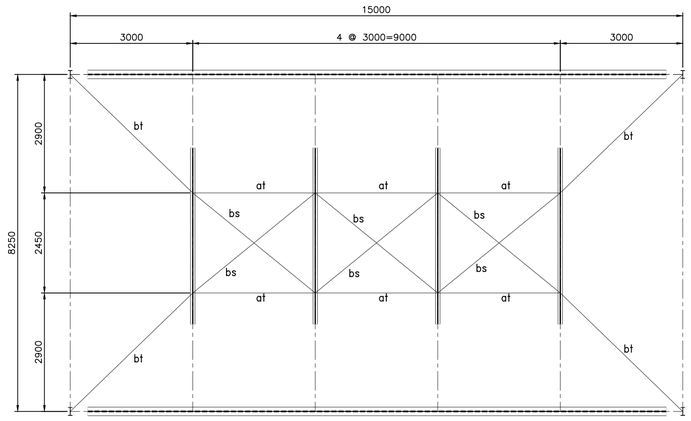
REVISION HISTORY

	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02–01–23		

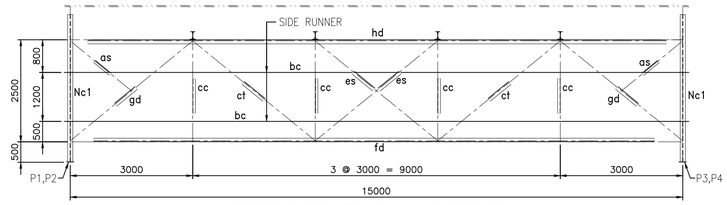
PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR–751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 18.0m LONG 4.45m WIDE

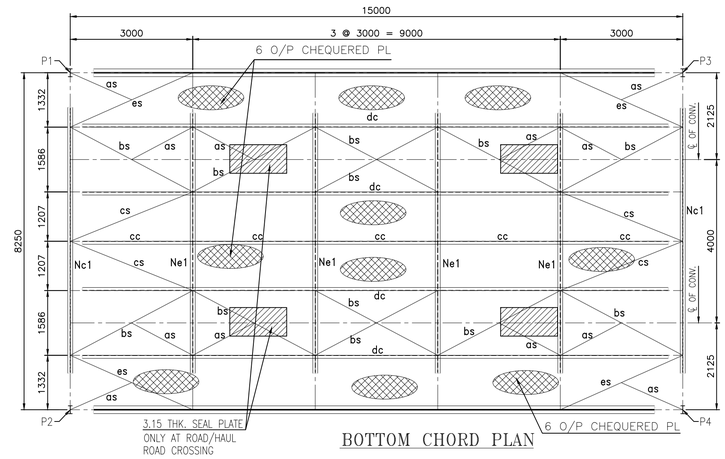
DWG. NO. M001–S–073 | SHEET 2 OF 10 | REV 0



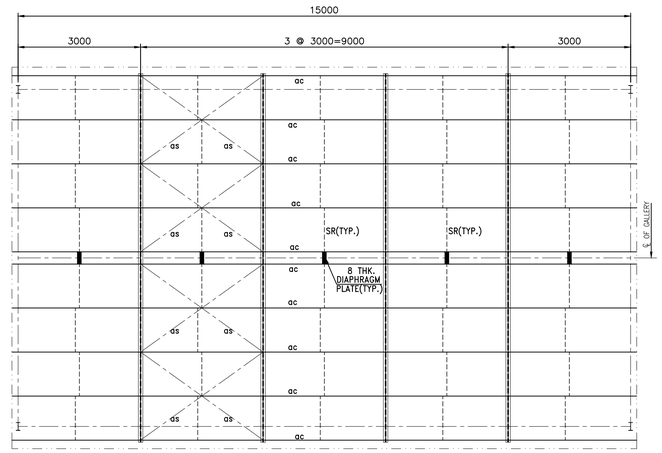
TOP CHORD PLAN



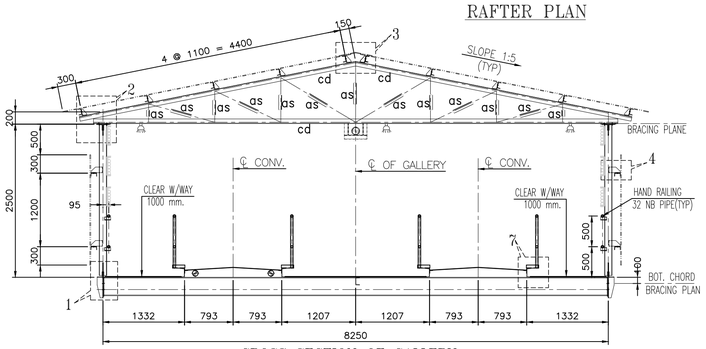
ELEVATION OF 15.0m GALLERY



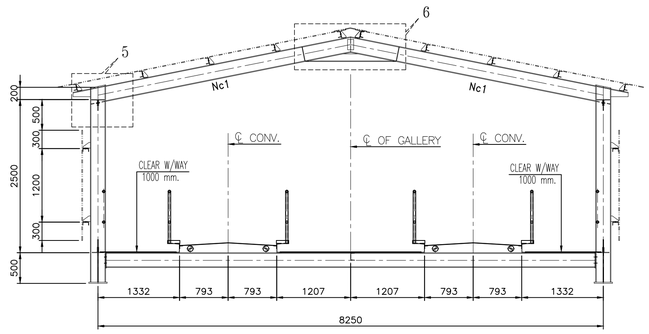
BOTTOM CHORD PLAN



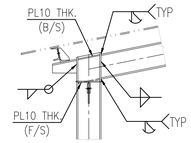
RAFTER PLAN



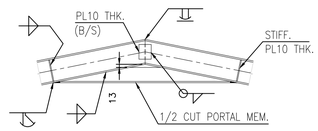
CROSS SECTION OF GALLERY



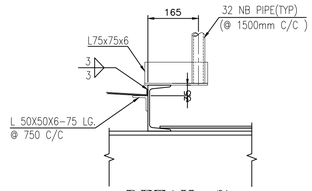
CROSS SECTION OF END PORTAL GALLERY



DETAIL 5



DETAIL 6



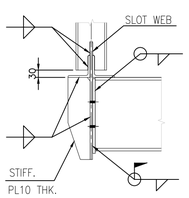
DETAIL-7

MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	┐L 50x50x6
bs	L 65x65x6
bt	┐L 65x65x6
cs	L 75x75x6
cd	╥ 75x75x6
ct	┐L 75x75x6
dt	┐L 75x75x8
es	L 90x90x8
fd	╥ 100x100x8
gd	╥ 100x100x10
hd	╥ 110x110x10
ac	MC 75
bc	MC 100
cc	MC 125
dc	MC 150
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THk.	

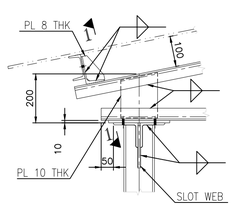
SUPPORT REACTION IN kN

Load Case	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	77.3	8.4	0.0	77.3	-8.4	0.0	77.3	8.4	0.0	77.3	-8.4
LL	0.1	142.0	10.8	-0.1	141.4	-10.7	0.0	141.9	10.7	0.0	141.4	-10.8
WL(+XP)	-0.1	-57.8	7.9	0.1	-57.7	-8.0	0.0	-43.1	4.5	0.0	-43.2	-4.5
WL(+XS)	-0.1	-17.4	3.3	0.1	-17.4	-3.3	0.0	-2.7	-0.2	0.0	-2.8	0.3
WL(-XP)	-0.1	-43.2	4.5	0.1	-43.1	-4.5	0.0	-57.7	8.0	0.0	-57.8	-7.9
WL(-XS)	-0.1	-2.8	-0.3	0.1	-2.7	0.2	0.0	-17.4	3.3	0.0	-17.4	-3.3
WL(+ZP)	-0.3	-54.5	-4.1	0.3	-42.0	-17.8	0.0	-54.3	-4.0	0.0	-42.1	-17.7
WL(+ZS)	-0.2	-14.1	-8.8	0.2	-1.6	-13.1	0.0	-14.0	-8.7	0.0	-1.7	-13.0
WL(-ZP)	0.2	-42.1	17.8	-0.2	-54.4	4.1	0.0	-42.0	17.7	0.0	-54.5	4.0
WL(-ZS)	0.2	-1.7	13.1	-0.2	-14.1	8.8	0.0	-1.7	13.0	0.0	-14.1	8.7

FOR TENDER PURPOSE ONLY



DETAIL 1



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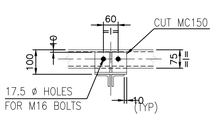
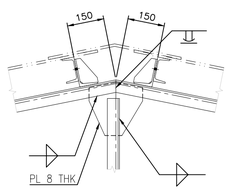


VIEW 1-1



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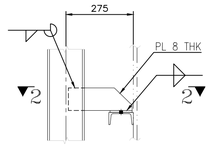

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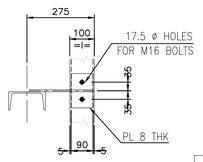

VIEW 2-2

+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

DWG NO.	DESCRIPTION
–	–
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–	–
–	–
–	–
–	–
–	–
M001-M-001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502-1994
9. SEAL PLATES SHALL CONFORM TO IS:1079-1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

CONTENTS OF THIS SHEET IS OUR COPYRIGHT PROPERTY. THE UNAUTHORISED USE OF THIS DOCUMENT OF USE OR CONTRARY TO ITS INTENDED PURPOSE IS NOT PERMITTED AND SHALL BE PREDECUTED

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
–	–	–	–	–	–
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0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

REVISION HISTORY

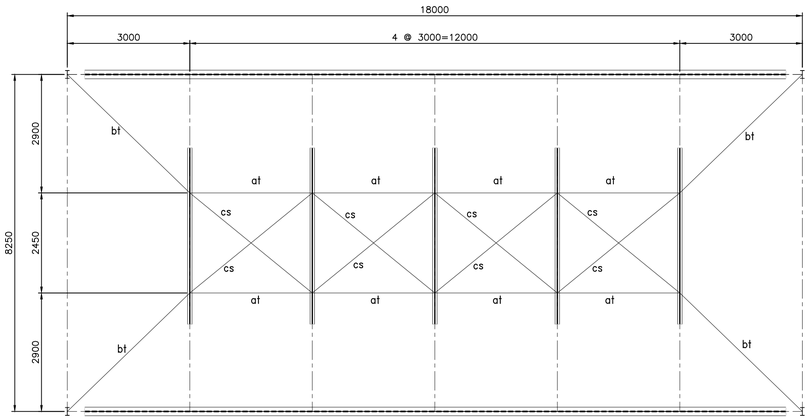
CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR-48, GURGAON, HARYANA-122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

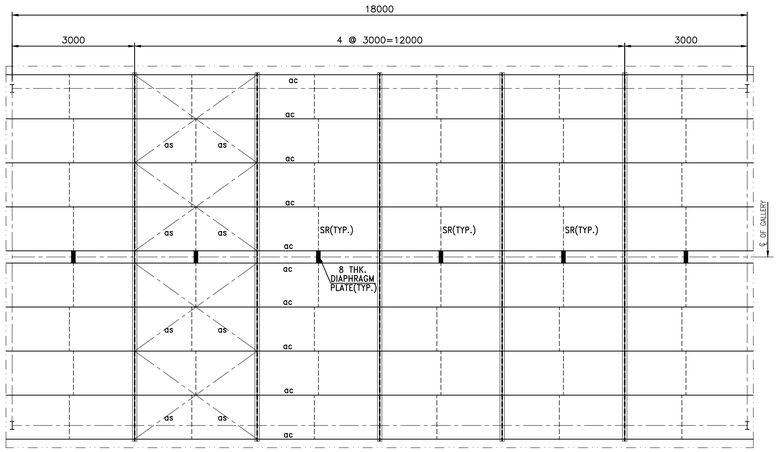
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02-01-23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 15.0m LONG 8.25m WIDE

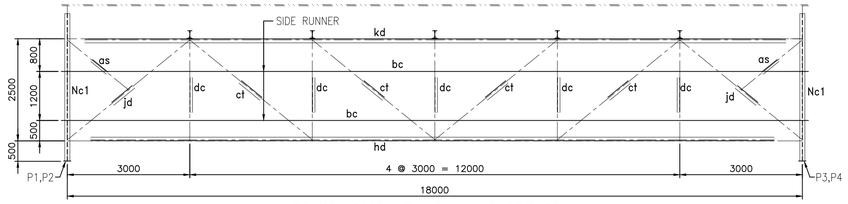
DWG. NO. M001-S-073 | SHEET 3 OF 10 | REV 0



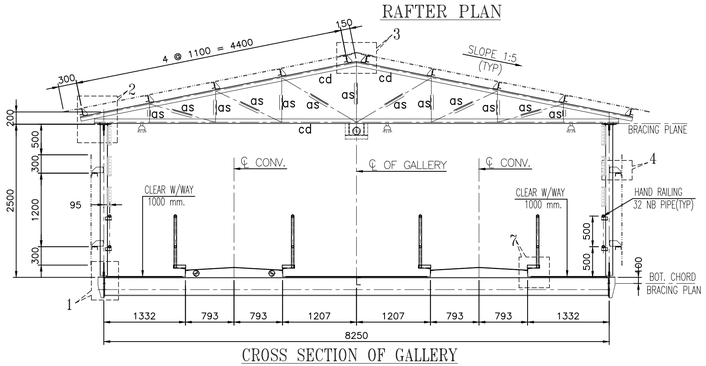
TOP CHORD PLAN



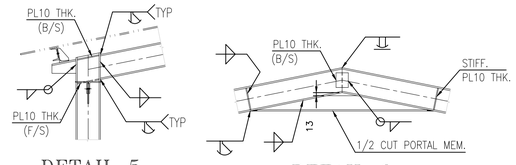
RAFTER PLAN



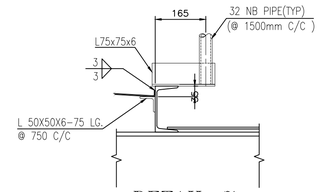
ELEVATION OF 18.0m GALLERY



CROSS SECTION OF GALLERY



DETAIL 5 DETAIL 6

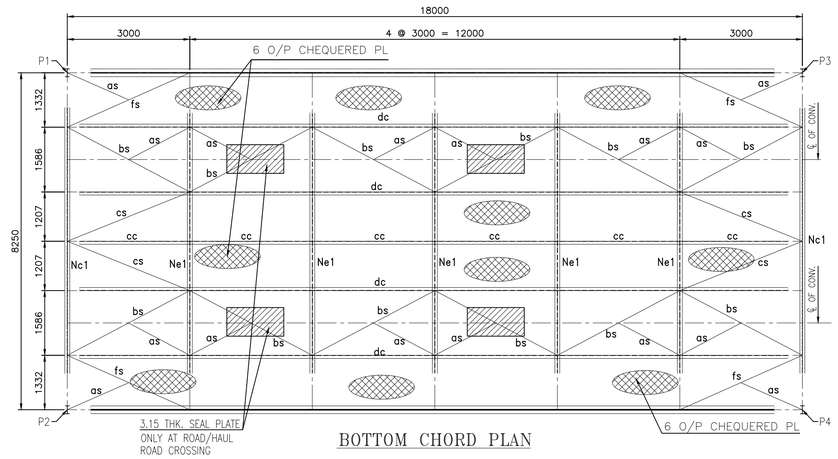


DETAIL-7

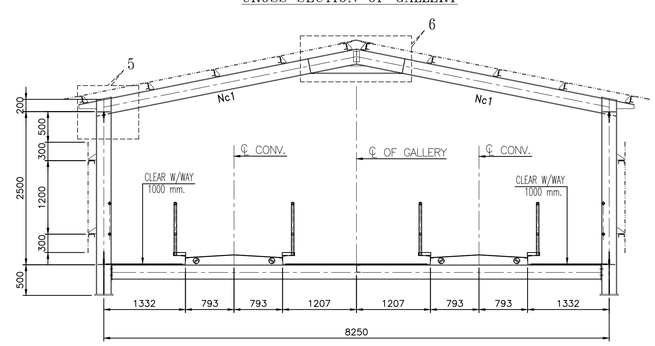
MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	⅂L 50x50x6
bs	L 65x65x6
bt	⅂L 65x65x6
cs	L 75x75x6
cd	⊤ 75x75x6
ct	⅂L 75x75x6
ed	⊤ 90x90x8
fs	L 100x100x8
fd	⊤ 100x100x8
hd	⊤ 110x110x10
jd	⊤ 110x110x12
kd	⊤ 130x130x12
ac	MC 75
bc	MC 100
cc	MC 125
dc	MC 150
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THk.	

SUPPORT REACTION IN kN

Load Case	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	94.8	6.9	0.0	94.8	-6.9	0.0	94.8	6.9	0.0	94.8	-6.9
LL	0.1	170.3	8.2	-0.1	169.6	-8.1	0.0	170.3	8.1	0.0	169.6	-8.2
WL(+XP)	0.0	-71.8	8.8	0.0	-71.8	-8.8	0.0	-54.9	5.4	0.0	-54.9	-5.4
WL(+XS)	0.0	-23.3	3.6	0.0	-23.3	-3.6	0.0	-6.4	0.2	0.0	-6.4	-0.2
WL(-XP)	0.0	-49.3	5.0	0.0	-49.3	-5.0	0.0	-66.1	8.4	0.0	-66.1	-8.4
WL(-XS)	0.0	-0.8	-0.3	0.0	-0.8	0.3	0.0	-17.7	3.2	0.0	-17.7	-3.2
WL(+ZP)	-0.2	-65.3	-5.7	0.2	-50.4	-20.6	0.0	-65.3	-5.6	0.0	-50.5	-20.5
WL(+ZS)	-0.2	-16.9	-10.9	0.2	-2.0	-15.4	0.0	-16.8	-10.8	0.0	-2.0	-15.3
WL(-ZP)	0.2	-50.4	20.6	-0.2	-65.3	5.7	0.0	-50.5	20.5	0.0	-65.3	5.6
WL(-ZS)	0.2	-2.0	15.4	-0.2	-16.9	10.9	0.0	-2.0	15.3	0.0	-16.8	10.8

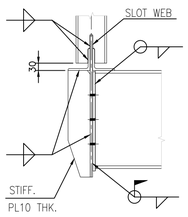


BOTTOM CHORD PLAN

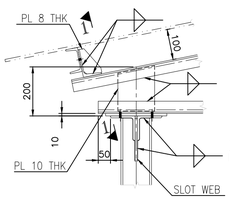


CROSS SECTION OF END PORTAL GALLERY

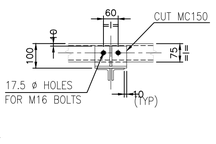
FOR TENDER PURPOSE ONLY



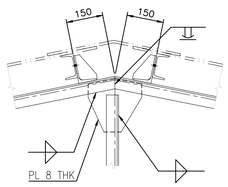
DETAIL 1



DETAIL 2



VIEW 1-1



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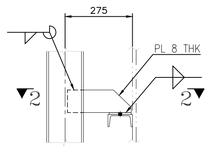

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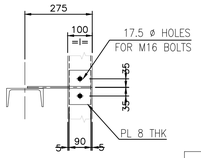

VIEW 2-2

+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

DWG NO.	DESCRIPTION
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M001-M-001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502-1994
9. SEAL PLATES SHALL CONFORM TO IS:1079-1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
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0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

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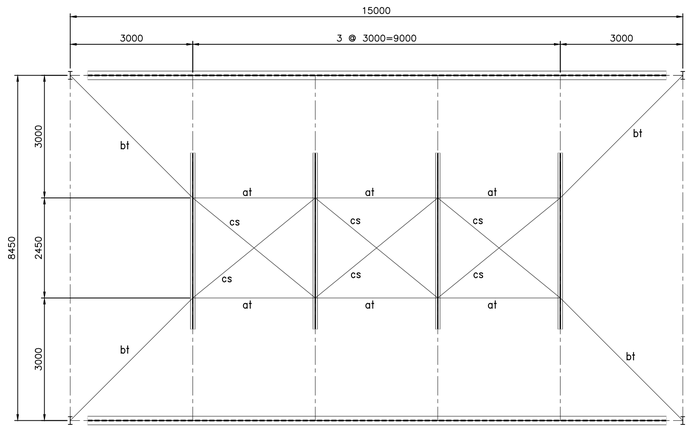
CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR-48, GURGAON, HARYANA-122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

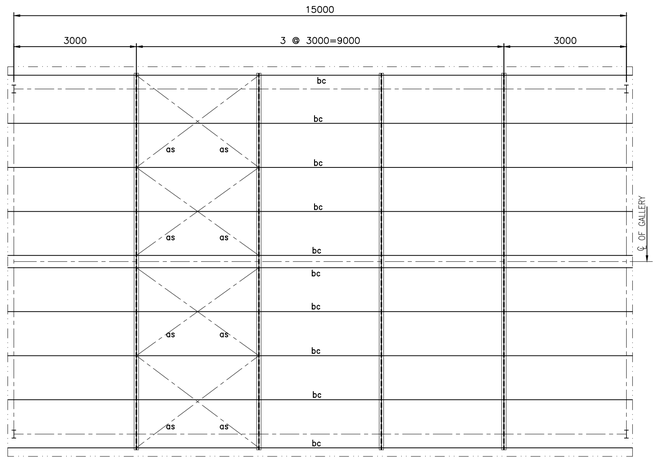
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02-01-23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 18.0m LONG 8.25m WIDE

DWG. NO. M001-S-073 | SHEET 4 OF 10 | REV 0



TOP CHORD PLAN



RAFTER PLAN

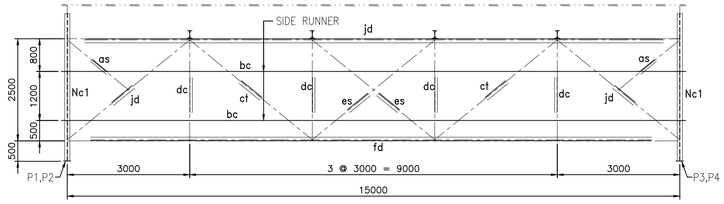
SUPPORT REACTION IN kN

Load Case	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	84.5	10.2	0.0	84.5	-10.2	0.0	84.5	10.2	0.0	84.5	-10.2
LL	0.1	152.7	14.1	-0.1	152.1	-14.1	0.0	152.7	14.1	0.0	152.1	-14.1
WL(+XP)	0.0	-70.8	9.3	0.0	-70.8	-9.3	0.0	-52.9	5.0	0.0	-52.9	-5.0
WL(+XS)	0.0	-21.3	3.9	0.0	-21.3	-3.9	0.0	-3.4	-0.5	0.0	-3.4	0.5
WL(-XP)	0.0	-53.5	5.1	0.0	-53.5	-5.1	0.0	-72.4	9.4	0.0	-72.4	-9.4
WL(-XS)	0.0	-3.4	-0.5	0.0	-3.4	0.5	0.0	-21.3	3.9	0.0	-21.3	-3.9
WL(+ZP)	-0.2	-66.5	-5.2	0.2	-51.8	-21.0	0.0	-66.4	-5.1	0.0	-51.8	-20.9
WL(+ZS)	-0.2	-17.0	-10.6	0.2	-2.3	-15.6	0.0	-16.9	-10.5	0.0	-2.3	-15.5
WL(-ZP)	0.2	-51.8	21.0	-0.2	-66.5	5.2	0.0	-51.8	20.9	0.0	-66.4	5.1
WL(-ZS)	0.2	-2.3	15.6	-0.2	-17.0	10.6	0.0	-2.3	15.5	0.0	-16.9	10.5

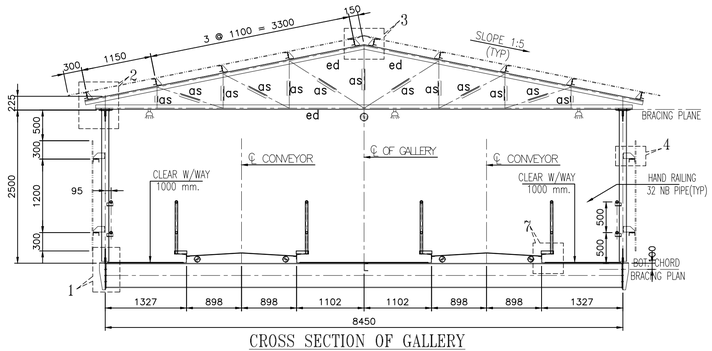
+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

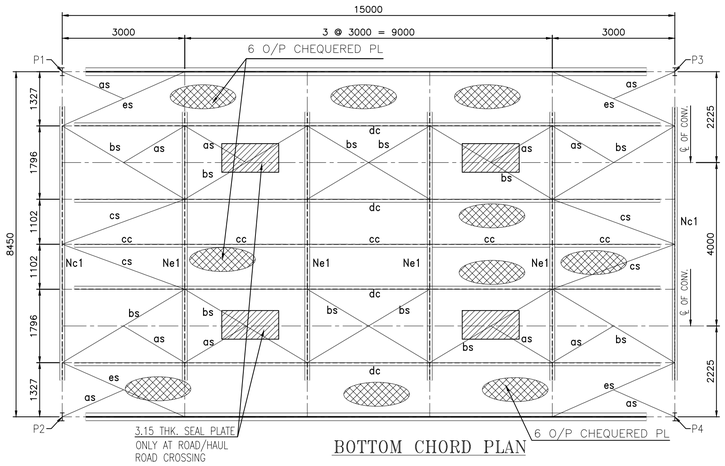
MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	┐L 50x50x6
bs	L 65x65x6
bt	┐L 65x65x6
cs	L 75x75x6
cd	╥ 75x75x6
ct	┐L 75x75x6
es	L 90x90x8
ed	╥ 90x90x8
fd	╥ 100x100x8
jd	╥ 110x110x12
bc	MC 100
cc	MC 125
dc	MC 150
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THk.	



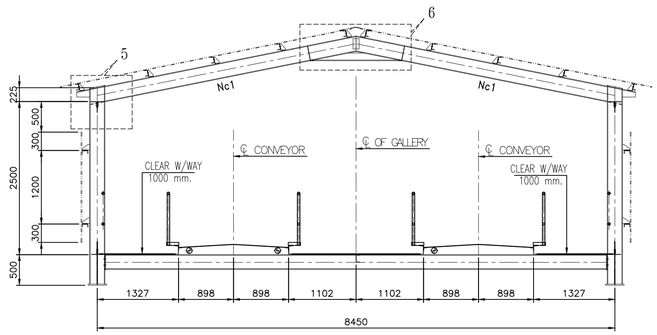
ELEVATION OF 15.0m GALLERY



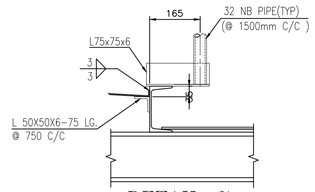
CROSS SECTION OF GALLERY



BOTTOM CHORD PLAN



CROSS SECTION OF END PORTAL GALLERY



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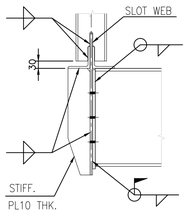
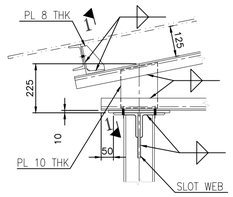


DETAIL 1



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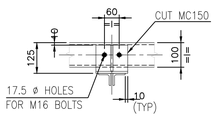
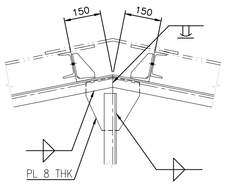


VIEW 1-1



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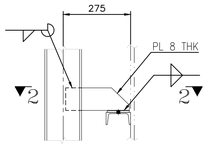
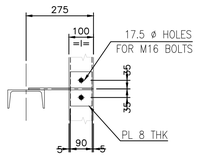
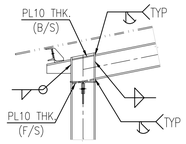


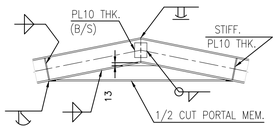
DETAIL 4



VIEW 2-2



DETAIL 5



DETAIL 6

FOR TENDER PURPOSE ONLY

DWG NO.	DESCRIPTION
–	–
–	–
–	–
–	–
–	–
–	–
–	–
M001-M-001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502-1994
9. SEAL PLATES SHALL CONFORM TO IS:1079-1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

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REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
–	–	–	–	–	–
–	–	–	–	–	–
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–	–	–	–	–	–
–	–	–	–	–	–
0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

REVISION HISTORY

CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR-48, GURGAON, HARYANA-122018

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02-01-23		

PROJECT: COAL HANDLING PLANT (10 MTY) HINGULA OCP

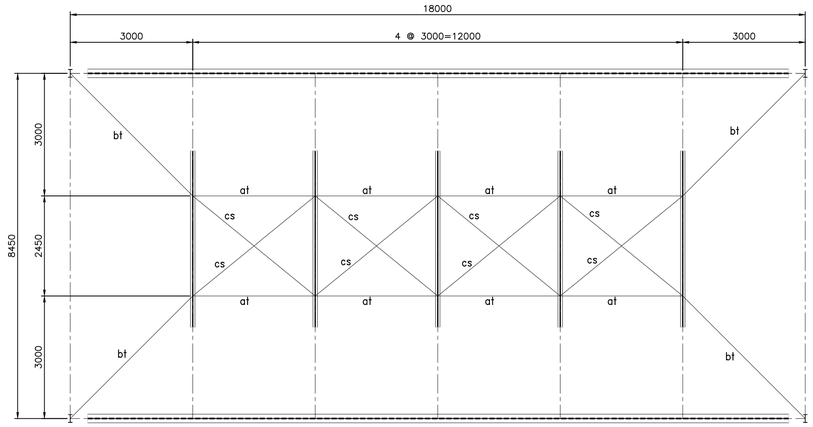
CLIENT: MCL MAHANADI COALFIELDS LIMITED

CONSULTANT: CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013

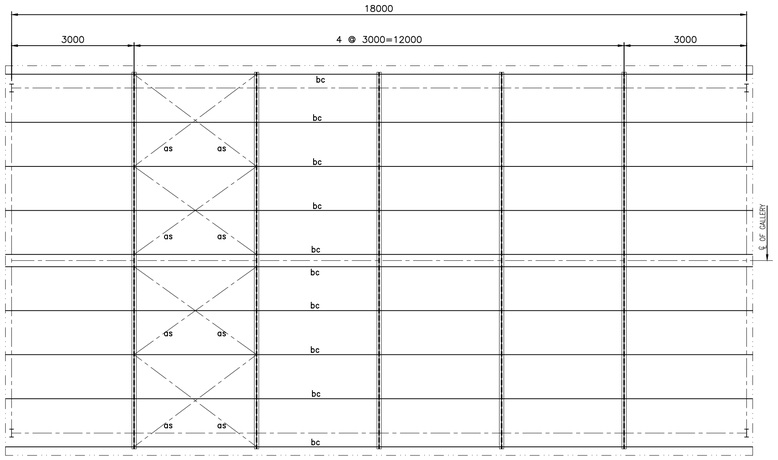
CONTRACTOR: ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 15.0m LONG 8.45m WIDE

DWG. NO. M001-S-073 | SHEET 5 OF 10 | REV 0



TOP CHORD PLAN



RAFTER PLAN

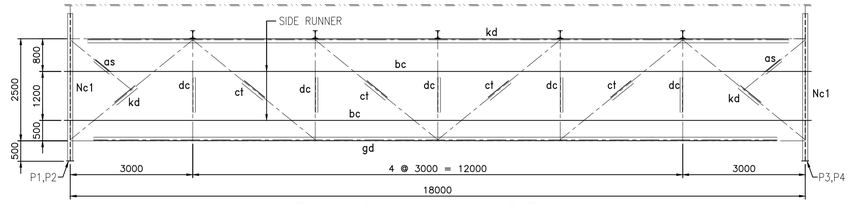
SUPPORT REACTION IN kN

Load Case	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	101.9	8.5	0.0	101.9	-8.5	0.0	101.9	8.5	0.0	101.9	-8.5
LL	0.1	183.2	11.0	-0.1	182.6	-11.0	0.0	183.2	11.0	0.0	182.8	-11.0
WL(+XP)	0.0	-88.0	10.8	0.0	-88.0	-10.8	0.0	-67.3	6.5	0.0	-67.3	-6.5
WL(+XS)	0.0	-28.6	4.4	0.0	-28.6	-4.4	0.0	-7.9	0.1	0.0	-7.9	-0.1
WL(-XP)	0.0	-68.4	6.6	0.0	-68.4	-6.6	0.0	-90.2	10.9	0.0	-90.2	-10.9
WL(-XS)	0.2	-6.8	0.2	-0.2	-7.0	-0.1	0.0	-21.8	3.1	0.0	-19.6	-2.0
WL(+ZP)	-0.3	-79.8	-6.6	0.3	-62.1	-24.8	0.0	-79.7	-6.5	0.0	-62.2	-24.7
WL(+ZS)	-0.3	-20.4	-13.0	0.3	-2.7	-18.4	0.0	-20.3	-12.8	0.0	-2.8	-18.3
WL(-ZP)	0.3	-62.1	24.8	-0.3	-79.8	6.6	0.0	-62.2	24.7	0.0	-79.7	6.5
WL(-ZS)	0.3	-2.7	18.4	-0.3	-20.4	13.0	0.0	-2.8	18.3	0.0	-20.3	12.8

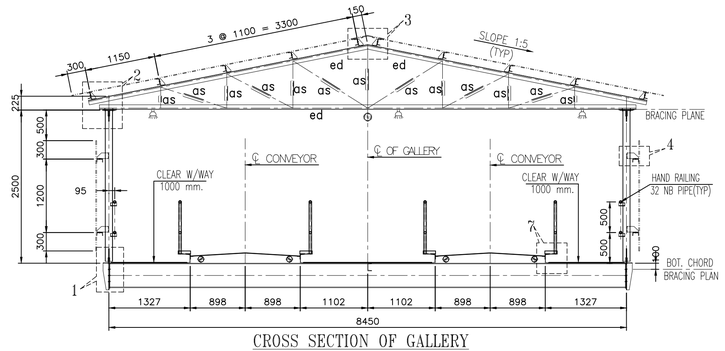
+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

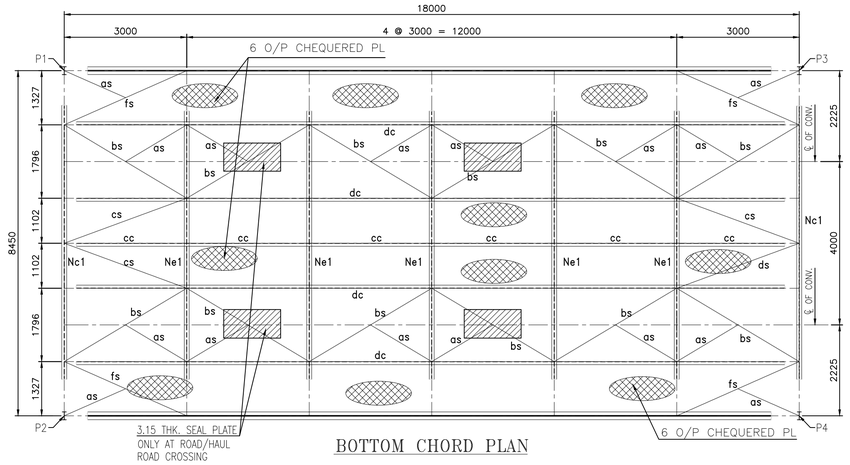
MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	⅂L 50x50x6
bs	L 65x65x6
bt	⅂L 65x65x6
cs	L 75x75x6
ct	⅂L 75x75x6
ds	L 75x75x8
dt	⅂L 75x75x8
es	L 90x90x8
ed	⊤ 90x90x8
fs	L 100x100x8
gd	⊤ 100x100x10
kd	⊤ 130x130x12
bc	MC 100
cc	MC 125
dc	MC 150
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THk.	



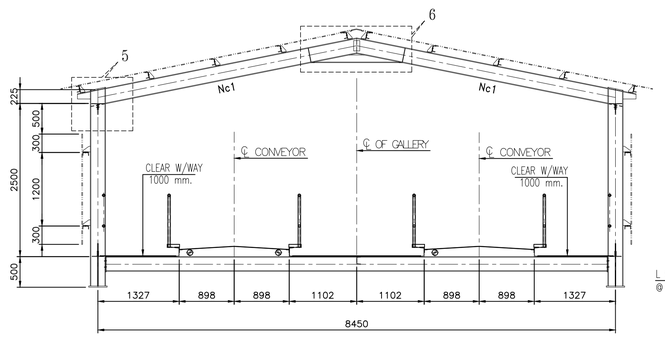
ELEVATION OF 18.0m GALLERY



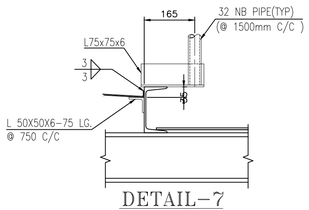
CROSS SECTION OF GALLERY



BOTTOM CHORD PLAN

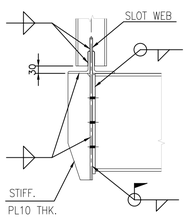


CROSS SECTION OF END PORTAL GALLERY

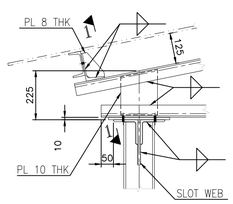


DETAIL-7

FOR TENDER PURPOSE ONLY



DETAIL 1



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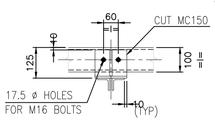
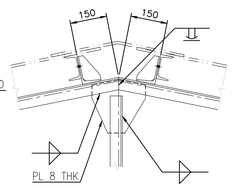


VIEW 1-1



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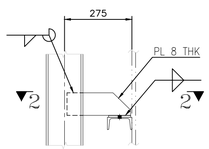

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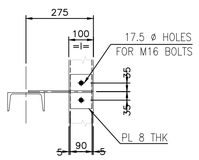

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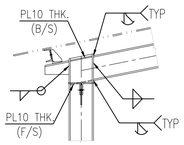

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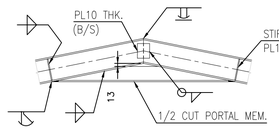

DETAIL 6

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR-751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD. 225, TOWER-A, JMD IT MEGAPOLIS, SOHNA ROAD SECTOR-48, GURGAON, HARYANA-122018

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02-01-23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 18.0m LONG 8.45m WIDE

DWG. NO. M001-S-073 | SHEET 6 OF 10 | REV 0

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REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

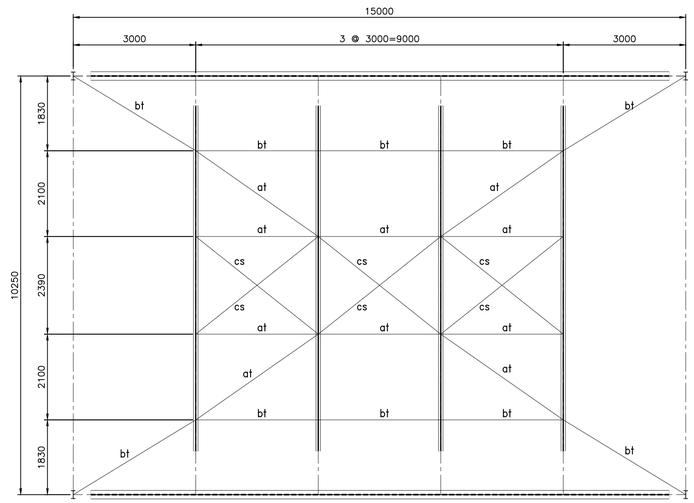
REVISION HISTORY

DWG NO.	DESCRIPTION
M001-M-001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

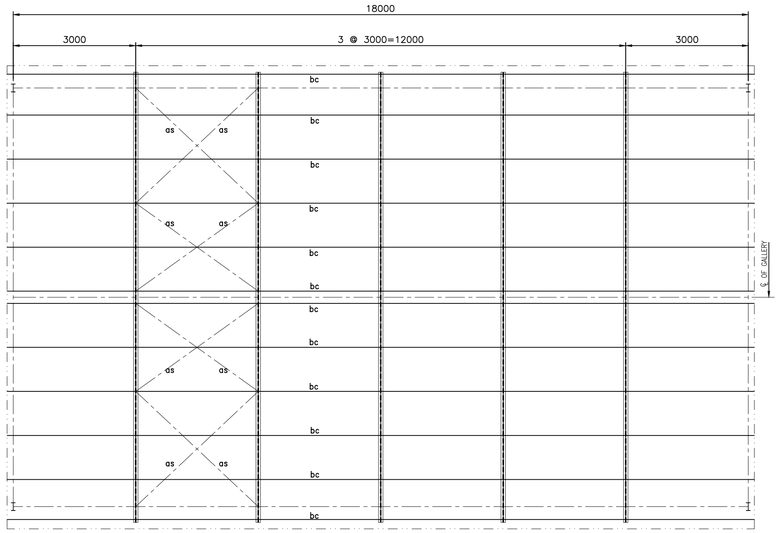
REFERENCES

STANDARD NOTES

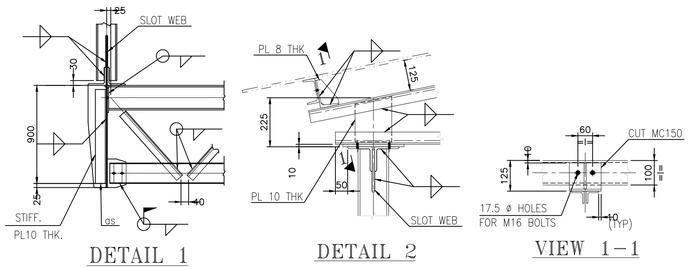
1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502-1994
9. SEAL PLATES SHALL CONFORM TO IS:1079-1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.



TOP CHORD PLAN

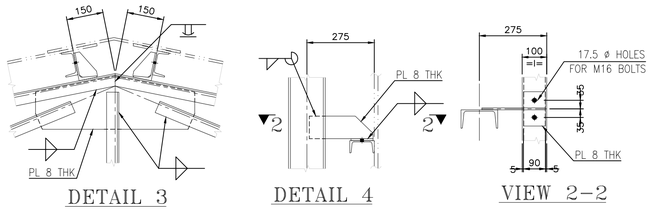


RAFTER PLAN

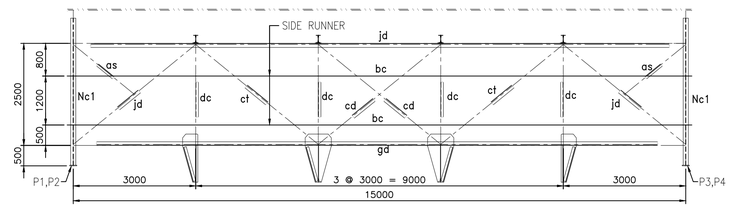


DETAIL 1 DETAIL 2 VIEW 1–1

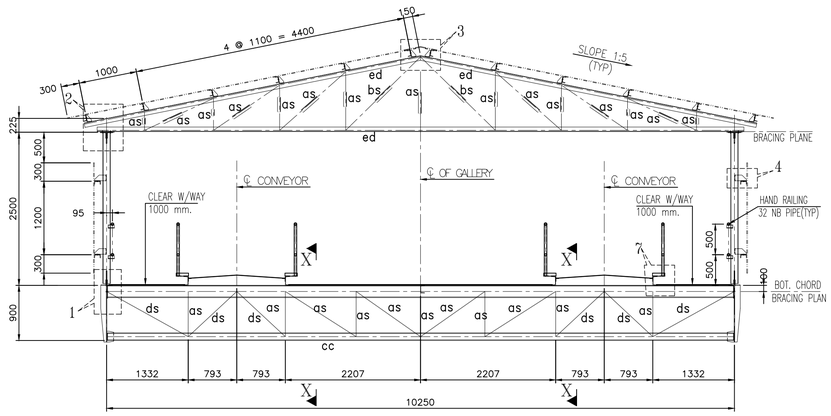
MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	┴ 50x50x6
bs	L 65x65x6
bt	┴ 65x65x6
cs	L 75x75x6
cd	╥ 75x75x6
ct	┴ 75x75x6
ds	L 75x75x8
es	L 90x90x8
ed	╥ 90x90x8
gd	╥ 100x100x10
jd	╥ 110x110x12
bc	MC 100
cc	MC 125
dc	MC 150
ec	MC 200
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THK.	



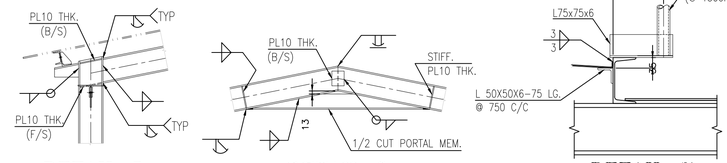
DETAIL 3 DETAIL 4 VIEW 2–2



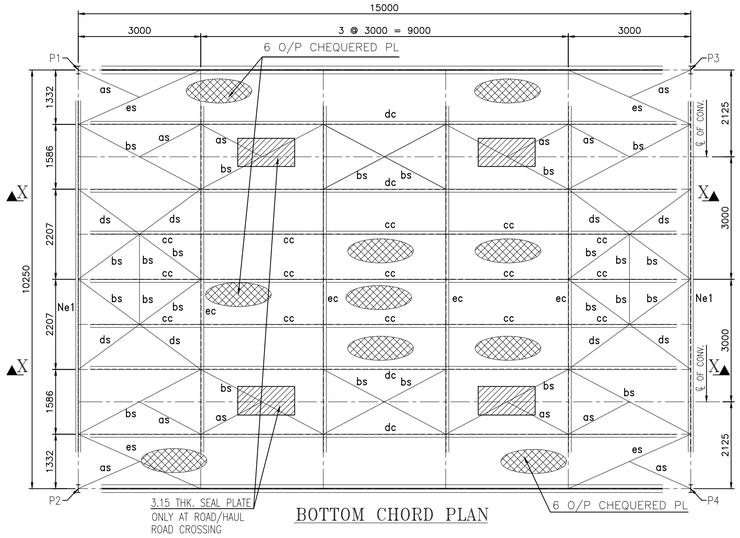
ELEVATION OF 15.0m GALLERY



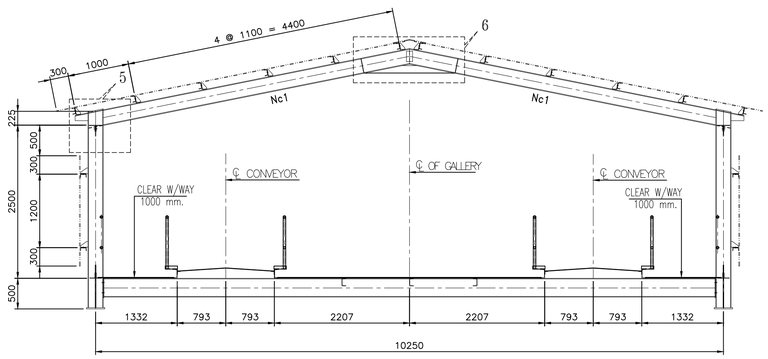
CROSS SECTION OF GALLERY



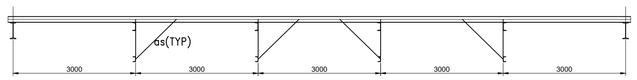
DETAIL 5 DETAIL 6 DETAIL–7



BOTTOM CHORD PLAN



CROSS SECTION OF END PORTAL GALLERY



SECTION X–X

SUPPORT REACTION IN kN

Load	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
Case	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	90.9	14.0	0.0	90.9	-14.0	0.0	90.9	14.0	0.0	90.9	-14.0
LL	0.1	172.8	19.0	-0.1	171.9	-19.0	0.0	172.8	19.0	0.0	171.9	-19.0
WL(+XP)	0.0	-75.1	13.1	0.0	-75.1	-13.1	0.0	-56.1	7.3	0.0	-56.1	-7.3
WL(+XS)	0.0	-25.1	5.4	0.0	-25.1	-5.4	0.0	-11.5	1.2	0.0	-11.5	-1.2
WL(-XP)	0.0	-56.1	10.5	0.0	-56.1	-10.5	0.0	-75.1	16.4	0.0	-75.1	-16.4
WL(-XS)	0.0	-11.5	1.2	0.0	-11.5	-1.2	0.0	-25.1	5.4	0.0	-25.1	-5.4
WL(+ZP)	-0.2	-68.5	0.3	0.2	-56.9	-21.5	0.0	-68.4	0.4	0.0	-57.0	-21.4
WL(+ZS)	-0.2	-16.0	-7.6	0.2	-4.4	-13.7	0.0	-15.9	-7.5	0.0	-4.5	-13.6
WL(-ZP)	0.2	-56.9	22.3	-0.2	-68.5	-1.1	0.0	-57.0	22.2	0.0	-68.4	-1.2
WL(-ZS)	0.2	-12.3	-9.5	-0.2	-8.1	-15.5	0.0	-12.4	-9.6	0.0	-8.0	-15.6

+X
+Z

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

FOR TENDER PURPOSE ONLY

DWG NO.	DESCRIPTION
–	–
–	–
–	–
–	–
–	–
–	–
–	–
M001–M–001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502–1994
9. SEAL PLATES SHALL CONFORM TO IS:1079–1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

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REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
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–	–	–	–	–	–
–	–	–	–	–	–
0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

REVISION HISTORY

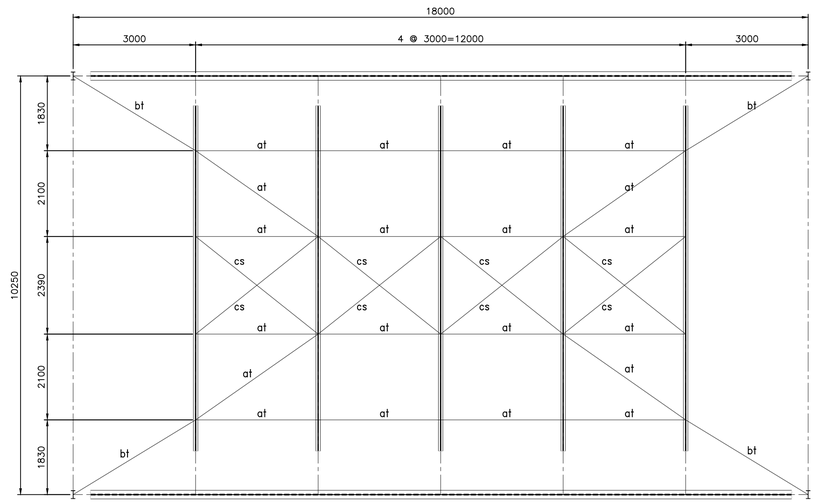
CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER–A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR–48, GURGAON, HARYANA–122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR–751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

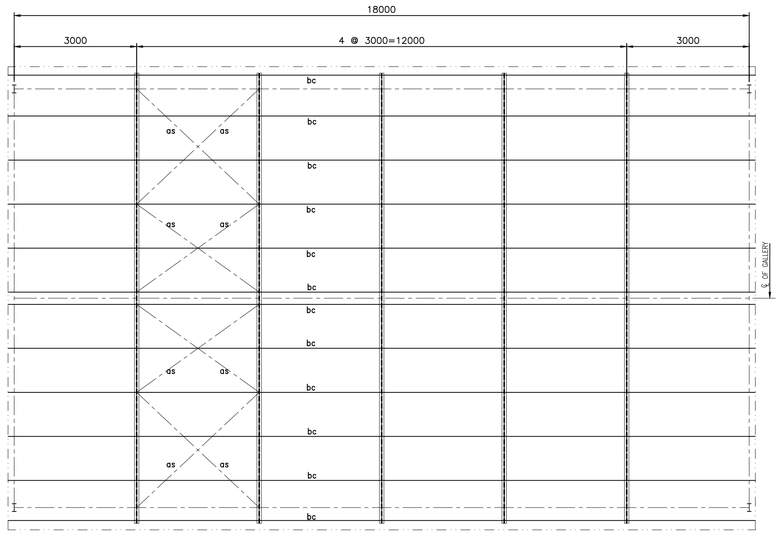
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02–01–23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 15.0m LONG 10.25m WIDE

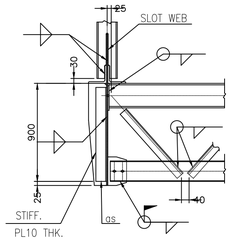
DWG. NO. M001–S–073 | SHEET 7 OF 10 | REV 0



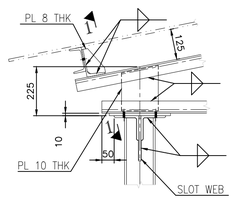
TOP CHORD PLAN



RAFTER PLAN



DETAIL 1



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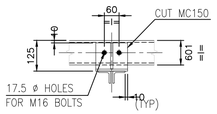
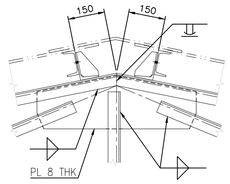


VIEW 1–1



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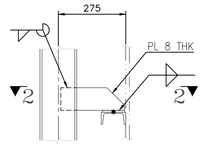

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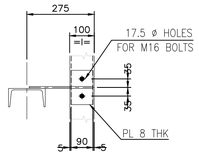
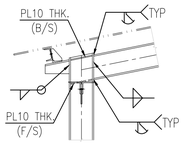


VIEW 2–2



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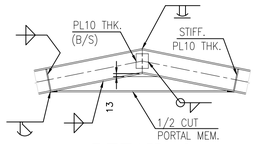

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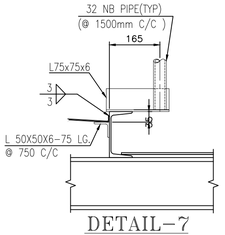
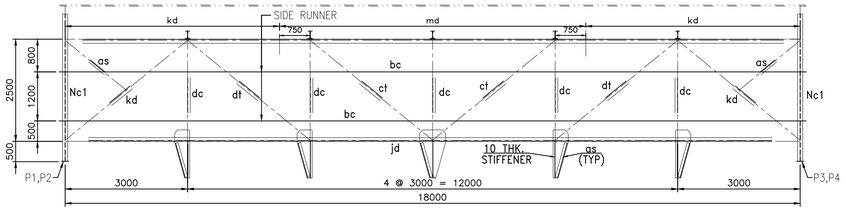
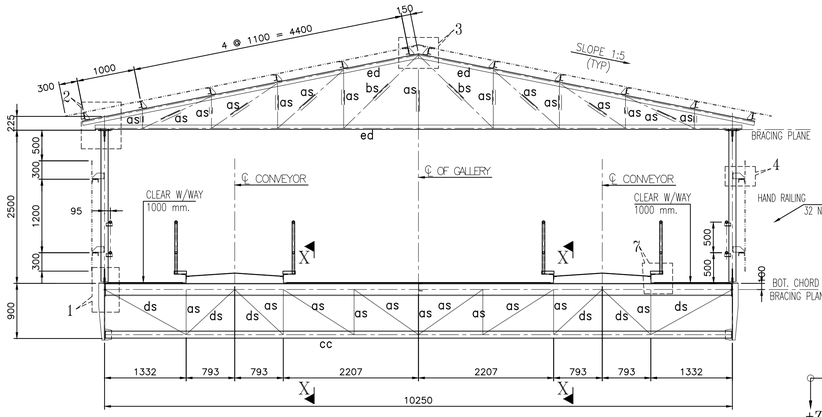


DETAIL–7



ELEVATION OF 18.0m GALLERY



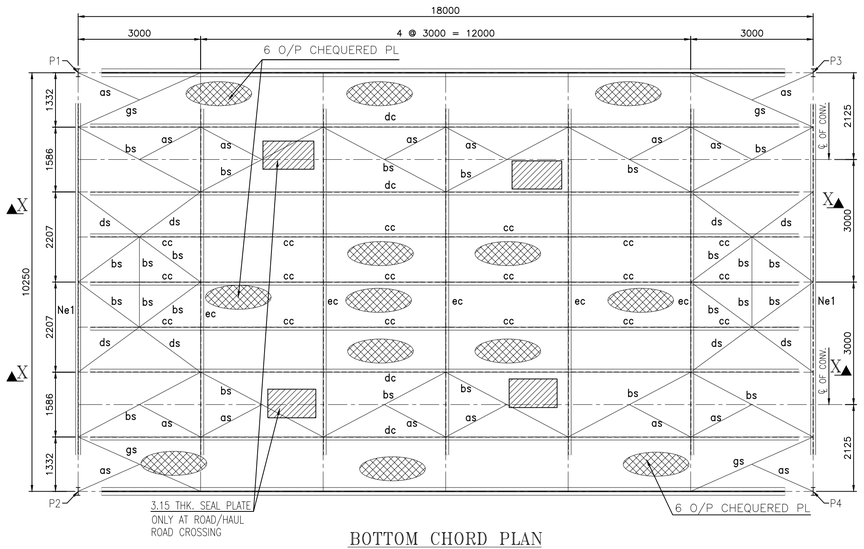
CROSS SECTION OF GALLERY

SUPPORT REACTION IN kN

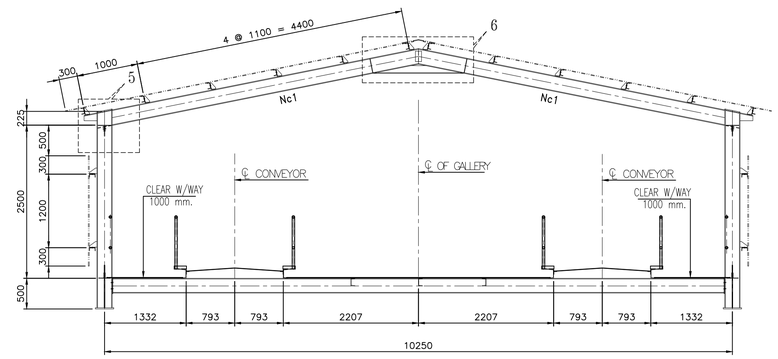
Load Case	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	109.0	12.4	0.0	109.0	-12.4	0.0	106.6	14.2	0.0	106.6	-14.2
LL	0.1	207.3	15.9	-0.1	206.2	-15.9	0.0	207.3	18.0	0.0	206.2	-18.0
WL(+XP)	0.0	-93.3	14.4	0.0	-93.3	-14.4	0.0	-71.4	8.3	0.0	-71.4	-8.3
WL(+XS)	0.0	-32.4	5.9	0.0	-32.4	-5.9	0.0	-16.8	1.7	0.0	-16.8	-1.7
WL(-XP)	0.0	-64.1	11.2	0.0	-64.1	-11.2	0.0	-86.0	17.4	0.0	-86.0	-17.4
WL(-XS)	0.0	-11.6	1.3	0.0	-11.6	-1.3	0.0	-27.2	5.6	0.0	-27.2	-5.6
WL(+ZP)	-0.1	-82.5	-1.7	0.1	-68.0	-25.2	0.0	-82.3	-1.7	0.0	-68.2	-25.2
WL(+ZS)	-0.1	-19.5	-10.4	0.1	-5.0	-16.6	0.0	-19.3	-10.1	0.0	-5.2	-16.8
WL(-ZP)	0.1	-68.0	26.1	-0.1	-82.5	0.9	0.0	-68.2	26.2	0.0	-82.3	0.7
WL(-ZS)	0.4	-15.1	-12.6	-0.4	-9.4	-18.8	0.0	-15.1	-12.6	0.0	-9.4	-19.3

NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

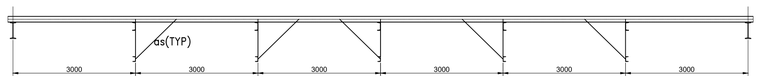
MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	⊥ 50x50x6
bs	L 65x65x6
bt	⊥ 65x65x6
cs	L 75x75x6
cd	⊤ 75x75x6
ct	⊥ 75x75x6
ds	L 75x75x8
dt	⊥ 75x75x8
es	L 90x90x8
ed	⊤ 90x90x8
gs	L 100x100x10
jd	⊤ 110x110x12
kd	⊤ 130x130x12
md	⊤ 130x130x16
bc	MC 100
cc	MC 125
dc	MC 150
ec	MC 200
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THk.	



BOTTOM CHORD PLAN



CROSS SECTION OF END PORTAL GALLERY



SECTION X–X

FOR TENDER PURPOSE ONLY

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR–751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02–01–23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 18.0m LONG 10.25m WIDE

DWG. NO. M001–S–073 | SHEET 8 OF 10 | REV 0

CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD. 225, TOWER–A, JMD IT MEGAPOLIS, SOHNA ROAD SECTOR–48, GURGAON, HARYANA–122018

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REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

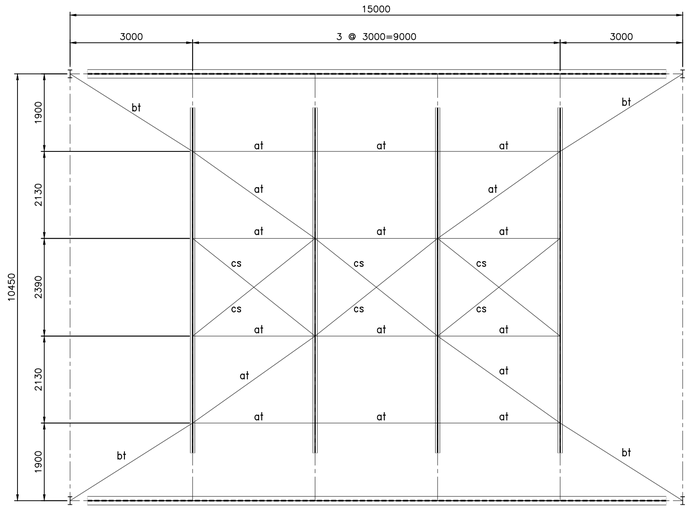
REVISION HISTORY

DWG NO.	DESCRIPTION
M001–M–001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

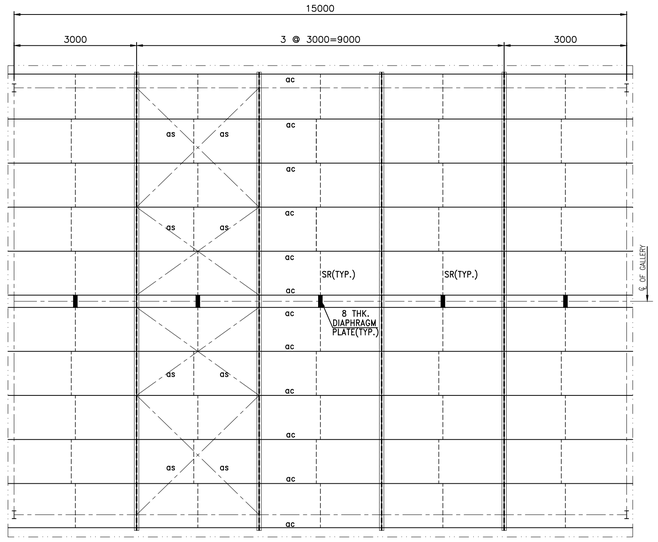
REFERENCES

STANDARD NOTES

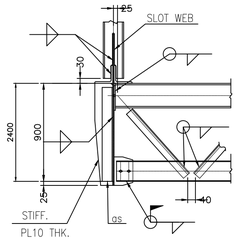
1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502–1994
9. SEAL PLATES SHALL CONFORM TO IS:1079–1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.



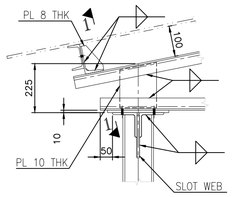
TOP CHORD PLAN



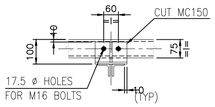
RAFTER PLAN



DETAIL 1

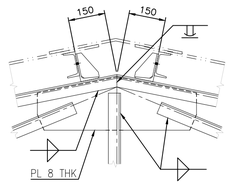


DETAIL 2

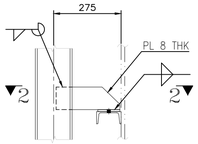


VIEW 1–1

MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	⊤ 50x50x6
bs	L 65x65x6
bt	⊤ 65x65x6
cs	L 75x75x6
cd	⊤ 75x75x6
ct	⊤ 75x75x6
ds	L 75x75x8
es	L 90x90x8
ed	⊤ 90x90x8
gd	⊤ 100x100x10
jd	⊤ 110x110x12
ac	MC 75
bc	MC 100
cc	MC 125
dc	MC 150
ec	MC 200
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THK.	



DETAIL 3



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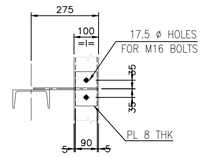
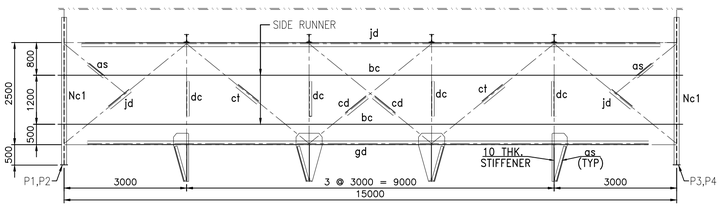
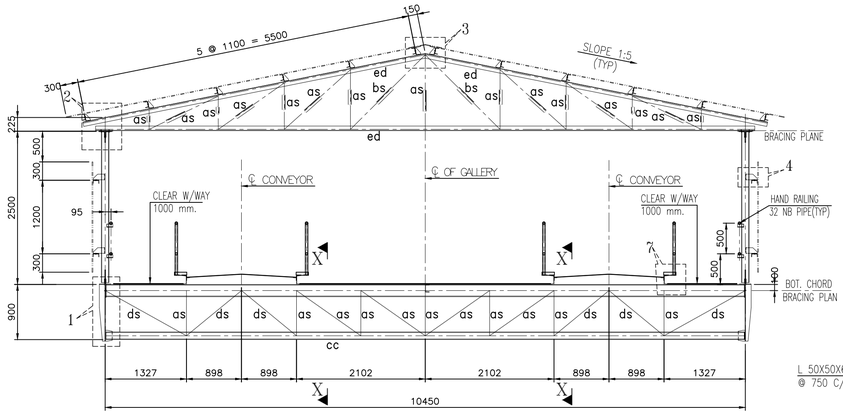


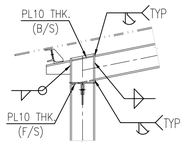
VIEW 2–2



ELEVATION OF 15.0m GALLERY



CROSS SECTION OF GALLERY



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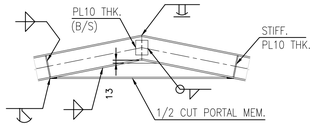
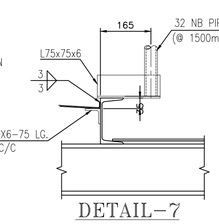


DETAIL 6

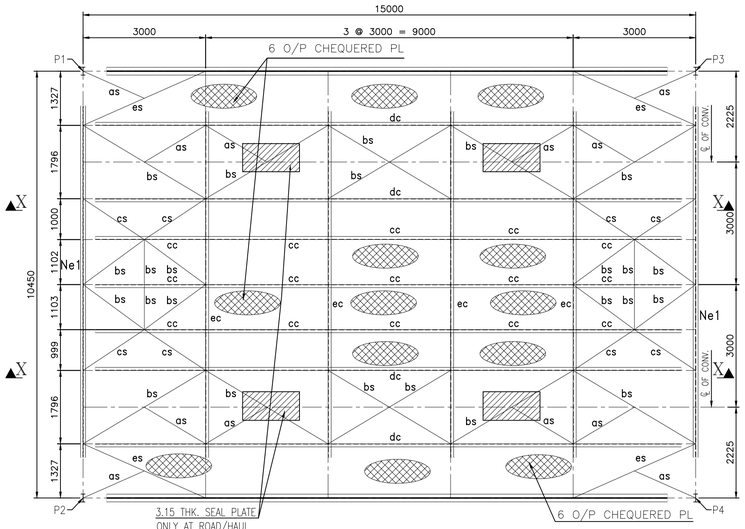
NOTES:
P STANDS FOR INTERNAL PRESSURE
S STANDS FOR INTERNAL SUCTION
(+) Y STANDS FOR VERTICAL UPWARD

SUPPORT REACTION IN kN

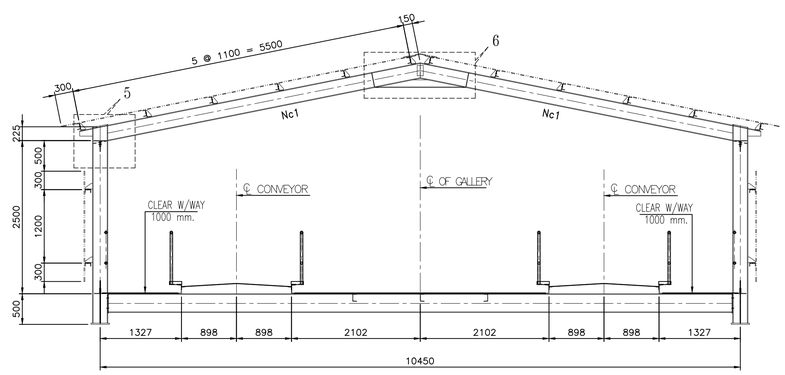
Load	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
Case	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	95.7	14.9	0.0	95.7	-14.9	0.0	95.7	14.9	0.0	95.7	-14.9
LL	0.1	176.3	18.9	-0.1	175.8	-18.9	0.0	176.2	18.9	0.0	175.8	-18.9
WL(+XP)	0.0	-67.2	12.2	0.0	-67.2	-12.2	0.0	-50.2	6.7	0.0	-50.2	-6.7
WL(+XS)	0.0	-20.2	4.9	0.0	-20.2	-4.9	0.0	-3.2	-0.6	0.0	-3.2	0.6
WL(-XP)	0.0	-50.2	6.7	0.0	-50.2	-6.7	0.0	-67.2	12.2	0.0	-67.2	-12.2
WL(-XS)	0.0	-3.2	-0.6	0.0	-3.2	0.6	0.0	-20.2	4.9	0.0	-20.2	-4.9
WL(+ZP)	-0.1	-61.2	0.8	0.1	-51.1	-19.3	0.0	-61.1	0.8	0.0	-51.2	-19.3
WL(+ZS)	-0.1	-14.2	-6.6	0.1	-4.1	-12.1	0.0	-14.1	-6.5	0.0	-4.2	-12.0
WL(-ZP)	0.1	-51.1	20.0	-0.1	-61.2	-1.5	0.0	-51.2	20.0	0.0	-61.1	-1.6
WL(-ZS)	0.1	-10.9	-8.3	-0.1	-7.4	-13.8	0.0	-11.0	-8.3	0.0	-7.3	-13.8



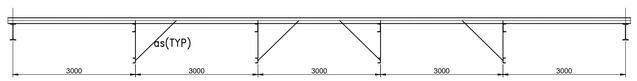
DETAIL–7



BOTTOM CHORD PLAN



CROSS SECTION OF END PORTAL GALLERY



SECTION X–X

FOR TENDER PURPOSE ONLY

DWG NO.	DESCRIPTION
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M001–M–001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

1. ALL DIMENSIONS ARE IN mm.
2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
4. PERMANENT BOLT = GR 8.8 CONFORMING IS:1367 AND IS:4000 UNO
5. ERECTION BOLT = GR 4.6 CONFORMING TO IS:1367
6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
8. CHEQUERED PLATES SHALL CONFORM TO IS:3502–1994
9. SEAL PLATES SHALL CONFORM TO IS:1079–1994 (SEMI KILLED QUALITY)
10. ALL SAG RODS SHALL BE M.S. ROUNDS BAR WITH DOUBLE NUTS AT EACH END
11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
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0	02.01.23	ISSUED FOR APPROVAL	SK	DD	SKM

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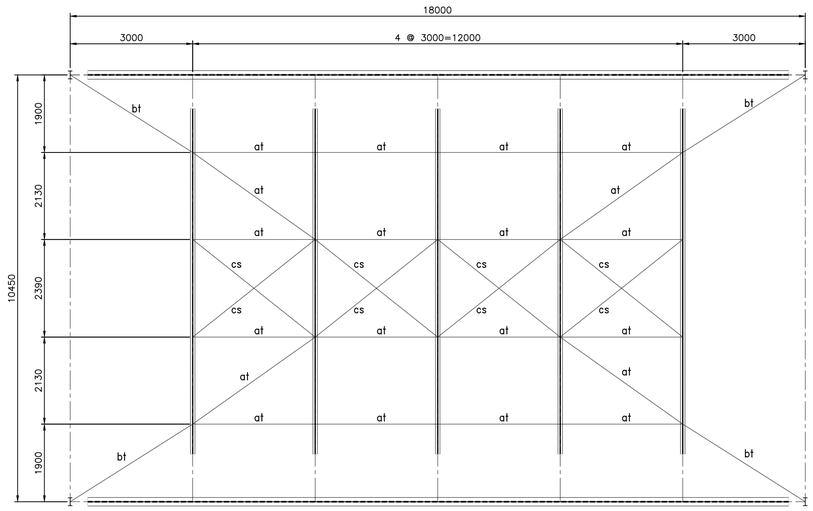
CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER–A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR–48, GURGAON, HARYANA–122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR–751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

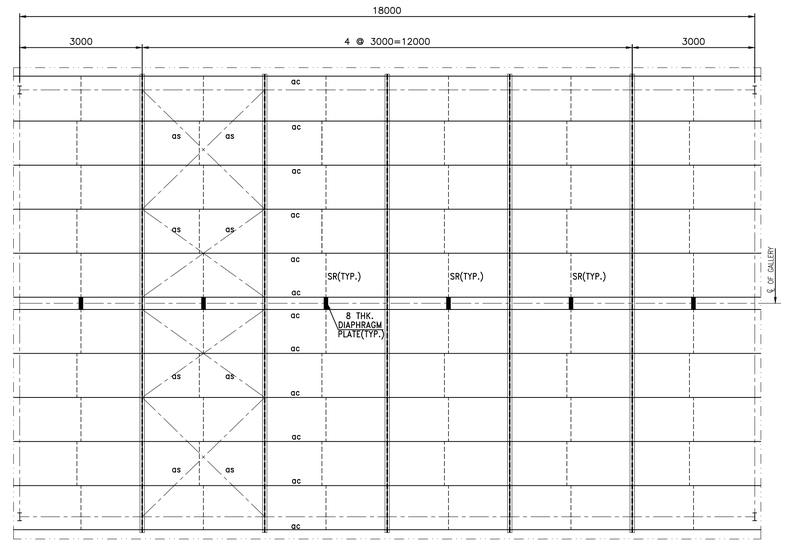
BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02–01–23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 15.0m LONG 10.45m WIDE

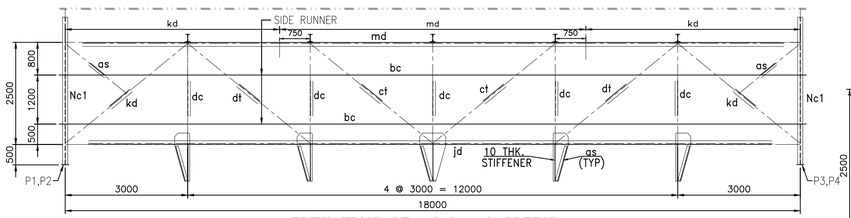
DWG. NO. M001–S–073 | SHEET 9 OF 10 | REV 0



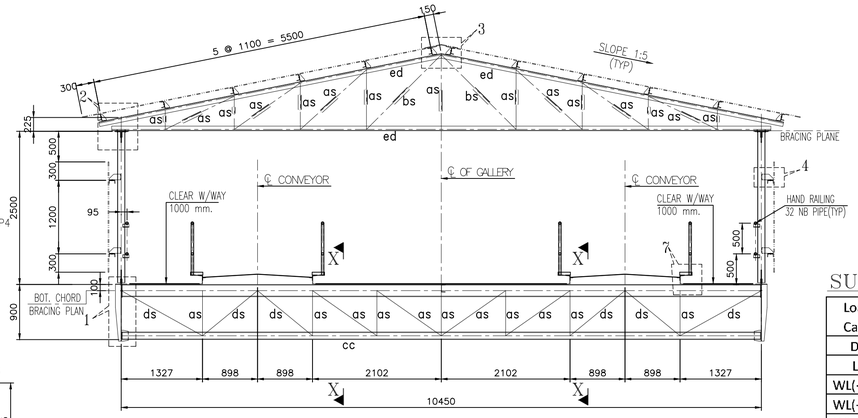
TOP CHORD PLAN



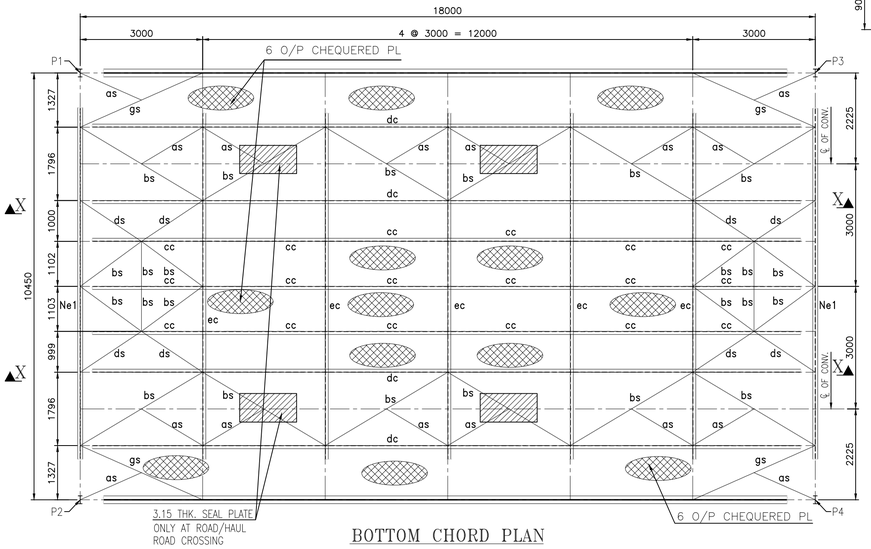
RAFTER PLAN



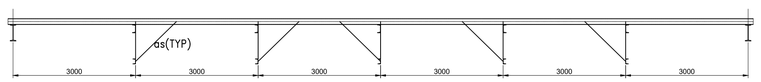
ELEVATION OF 18.0m GALLERY



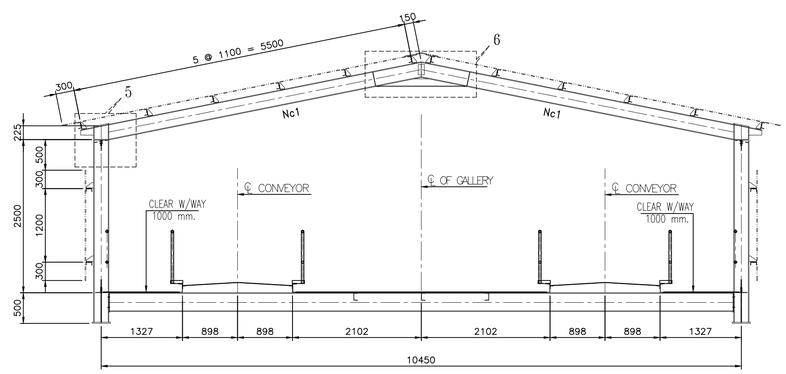
CROSS SECTION OF GALLERY



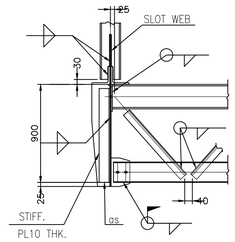
BOTTOM CHORD PLAN



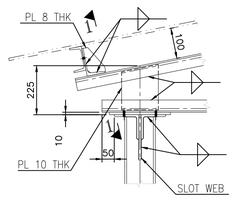
SECTION X–X



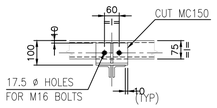
CROSS SECTION OF END PORTAL GALLERY



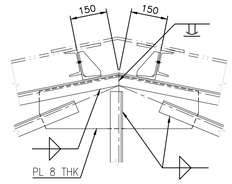
DETAIL 1



DETAIL 2



VIEW 1–1



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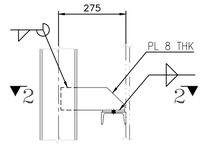

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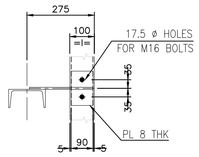

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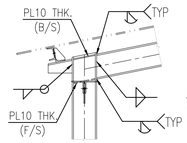

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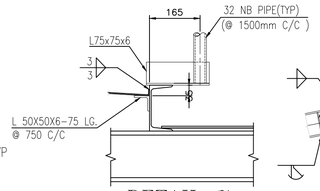
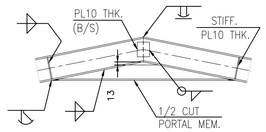


DETAIL–7



DETAIL 6

NOTES:

P STANDS FOR INTERNAL PRESSURE

S STANDS FOR INTERNAL SUCTION

(+) Y STANDS FOR VERTICAL UPWARD

SUPPORT REACTION IN kN

Load Case	Support Node - P1			Support Node - P2			Support Node - P3			Support Node - P4		
	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ	Fx	Fy	FZ
DL	0.0	114.9	13.1	0.0	114.9	-13.1	0.0	114.6	13.1	0.0	114.6	-13.1
LL	0.1	211.5	15.1	-0.1	210.9	-15.1	0.0	211.5	15.1	0.0	210.8	-15.1
WL(+XP)	0.0	-83.6	13.6	0.0	-83.6	-13.6	0.0	-63.9	8.2	0.0	-63.9	-8.2
WL(+XS)	0.0	-27.1	5.4	0.0	-27.1	-5.4	0.0	-7.5	-0.1	0.0	-7.5	0.1
WL(-XP)	0.0	-63.9	8.2	0.0	-63.9	-8.2	0.0	-83.6	13.6	0.0	-83.6	-13.6
WL(-XS)	0.0	-7.5	-0.1	0.0	-7.5	0.1	0.0	-27.1	5.4	0.0	-27.1	-5.4
WL(+ZP)	-0.2	-73.7	-0.7	0.2	-61.1	-23.0	0.0	-73.6	-0.6	0.0	-61.2	-22.9
WL(+ZS)	-0.2	-17.2	-9.0	0.2	-4.7	-14.8	0.0	-17.2	-8.9	0.0	-4.8	-14.7
WL(-ZP)	0.2	-61.1	23.8	-0.2	-73.7	-0.2	0.0	-61.2	23.7	0.0	-73.6	-0.2
WL(-ZS)	0.2	-13.3	-11.0	-0.2	-8.6	-16.8	0.0	-13.4	-11.1	0.0	-8.6	-16.9

MEMBER SCHEDULE	
MKD.	SECTION SCHEDULE
as	L 50x50x6
at	┼ 50x50x6
bs	L 65x65x6
bt	┼ 65x65x6
cs	L 75x75x6
cd	╥ 75x75x6
ct	┼ 75x75x6
ds	L 75x75x8
dt	┼ 75x75x8
ed	╥ 90x90x8
gs	L 100x100x10
jd	╥ 110x110x12
kd	╥ 130x130x12
md	╥ 130x130x16
ac	MC 75
bc	MC 100
cc	MC 125
dc	MC 150
ec	MC 200
Nc1	NPB 300x150x42.24
Ne1	NPB 400x180x75.66
SR	SAG ROD 16ø
ALL GUSSET PLATE = 10 THK.	

FOR TENDER PURPOSE ONLY

DWG NO.	DESCRIPTION
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M001–M–001A	GA DRAWING OF TYPICAL CROSS SECTION OF CONVEYOR GALLERIES

REFERENCES

STANDARD NOTES

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2. ALL PLATES ARE 8 mm THK. UNO.
3. GRADE OF STEEL = E250 (FE 410W) A/B/C CONFORMING TO IS:2062
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6. ALL SHOP CONNECTION SHALL BE WELDED AND SITE CONNECTION SHALL BE EITHER BOLTED OR WELDED
7. ALL WELDING TO BE DONE IN CONFORMITY WITH IS:816 FOLLWOING SYMBOLS, DETAILED IN IS:813
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9. SEAL PLATES SHALL CONFORM TO IS:1079–1994 (SEMI KILLED QUALITY)
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11. ALL WELDS ARE 6 mm THK FILLET WELD UNO.

REVISION HISTORY

REV.	DATE	DESCRIPTION	BY	CHKD.	APPD.
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CONTRACTOR'S DESIGN CONSULTANT: LEPTON PROJECTS PRIVATE LTD.
225, TOWER–A, JMD IT MEGAPOLIS, SOHNA ROAD
SECTOR–48, GURGAON, HARYANA–122018

PROJECT	COAL HANDLING PLANT (10 MTY) HINGULA OCP
CLIENT	MCL MAHANADI COALFIELDS LIMITED
CONSULTANT	CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD. (A SUBSIDIARY OF COAL INDIA LIMITED) BHUBANESWAR–751013
CONTRACTOR	ENGINEERING PROJECTS (INDIA) LTD BHUBANESWAR

BY	NAME	SIGN	RELEASED FOR
DESIGNED	VIKRAM		APPROVAL
DRAWN	SONU		SHEET SIZE A1
CHECKED	–		
APPROVED	–		SCALE 1:50
DATE	02–01–23		

TITLE: STRUCTURAL GA FOR STANDARD GALLERY 18.0m LONG 10.45m WIDE

DWG. NO. M001–S–073 | SHEET 10 OF 10 | REV 0

इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि.
(भारत सरकार का उद्यम)
ENGINEERING PROJECTS (INDIA) LTD.
(A Government of India Enterprise)

AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

NIT No: PCO/BBSR/933/155

FOR

Tender for Supply, Fabrication and Painting of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha. (2nd Call)

VOLUME – III

Price Bid

Validate Print Help

Item Wise BoQ

Tender Inviting Authority: ENGINEERING PROJECTS (INDIA) LTD., PCO Bhubaneswar

Name of Work -Tender for Supply, Fabrication and Painting (2 Coat Primer) of Structure for Conveyor Gallery, Trestles, Transfer houses for Construction of CHP for Transportation of Coal (10 Mty) from Head End of Pipe Conveyor at Transfer House TH-2 to Silo (Under Construction) at Mahanadi Coalfields Limited (MCL) Hingula Area, Talcher, Dist. Angul, Odisha.

Contract No: PCO/BBSR/933/155 dtd. 12.01.2024

Name of the Bidder/ Bidding Firm / Company :							
PRICE SCHEDULE **(DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)** **(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)**							
Sl. No.	**Item Description**	**Quantity**	**Units**	**BASIC RATE (including Transportation Insurance, F.O.R.) In Figures To be entered by the Bidder in Rs. P**	**TOTAL AMOUNT Without Taxes in Rs. P**	**TOTAL AMOUNT With Taxes in Rs. P**	**TOTAL AMOUNT In Words**
1	**2**	**4**	**5**	**7**	**13**	**14**	**15**
1	Supply, Fabrication and Painting of structural steel for Conveyor Galleries, transfer Houses. (Including Sand blasting and Primer of two Coats)	1100.00	MT		**0.00**	**0.00**	INR Zero Only
Total in Figures					**0.00**	**0.00**	INR Zero Only
Quoted Rate in Words				**INR Zero Only**			

Note : 1. Rates are to be inclusive of Loading, Transportation, Freight, Transit Insurance.
2. Rate is F.O.R MCL Talcher CHP Site.