NIT FOR TENDER NO. CGI0227L23

OIL INDIA LIMITED

(A Government of India Enterprise)
Pipeline Headquarters

P. O. – Udayan Vihar, Guwahati-781171, Assam, India

E mail: ramanujd@oilindia.in

E-Tender

OIL INDIA LIMITED invites Competitive Domestic Bid through its e-procurement portal "https://etender.srm.oilindia.in/irj/portal" for the following Services:

Tender No	Bid Closing Date & Time	Service Description
CGI0227L23	24.05.2022 At 11.00 A.M.	Construction Management Services for Pipeline Laying and associated services for Replacement of 8" Spur line from PS1, Duliajan to Digboi Refinery under Pipeline Dept., Oil India Limited for a period of 12 Months (extendable by 12 months)

The details of IFB and procedures for applying & participation can be viewed using "Guest Login" provided in the e-procurement portal and also in OIL's web site www.oil-india.com. The link to OIL's E-Procurement portal has also been provided through OIL's website

All corrigenda, addenda, amendments, time extension, etc. to the tender will be hosted on above Website and e-portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

All corrigenda, addenda, amendments, time extension, etc. to the tender will be hosted on above Website and e-portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

1.0. BID REJECTION CRITERIA (BRC):

The bid shall conform to the specifications and terms and conditions given in the Bidding Documents. Bids will be rejected in case material and services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected. All the documents related to BRC shall be submitted along with the Techno-Commercial Bid.

- 1.1 All the supporting documents in compliance to BEC/BRC requirements shall be scanned and uploaded along with the technical bid. Non-submission of the documents will result in rejection of bids.
- 1.2 Any bid not complying BEC/BRC requirements shall be summarily rejected.
- 1.3 Bidders must have **PF Account** in their name issued by Regional Provident Fund Commissioner. Bidders must have **ESI Account** in their name. Documentary evidence of the same is to be submitted.
- 1.4 Deviation to the following provision of the tender document liable for rejection of Bid:
 - i. Firm price
 - ii. EMD / Bid Bond Bid Security Declaration
 - iii. Scope of work
 - iv. Specifications
 - v. Price Schedule
 - vi. Delivery / Completion Schedule
 - vii. Period of Validity of Bid
 - viii. Liquidated Damages
 - ix. Performance Bank Guarantee / Security deposit
 - x. Guarantee of material / work
 - xi. Arbitration / Resolution of Dispute
 - xii. Force Majeure
 - xiii. Applicable Laws
 - xiv. Integrity Pact, if applicable
 - xv. Any other condition specifically mentioned in the tender documents elsewhere that non-compliance of the clause lead to rejection of the bid.
- 1.5 Other Information /Documents: Bidders must furnish the following information with relevant documents wherever necessary:
- a) Tax Exemption Certificate, if any, if /applicable.
- b) PAN no. (photocopy of the PAN card required).
- c) GST registration No.
- d) Bank account No. with name of Bank, Type of account, Bank address.
- e) P.F. Account No. / Code.
- f) ESI registration no.

- 1.6 The successful bidder /contractor shall undertake to indemnify the company against all claims which may arise under the under noted Acts during signing of the contract:
- a) The FACTORY Act 1948
- b) The Minimum Wages Act 1948
- c) The Workman's compensation Act 1923
- d) The payment of wages Act 1963
- e) The payment of Bonus Act 1965
- f) The Contract Labour (Regulation and Abolition) Act 1970 and the rules framed thereunder.
- g) Employees' Pension Scheme 1995.
- h) Interstate Migrant (regulation of Employment and Condition of Service) Act 1979
- i) The Employees Provident Fund and Miscellaneous Provisions Act 1952
- j) AGST Act/VAT
- k) GST Act
- 1.7 Documentary Evidence in support of sound financial standing, Bank Account Number from any Nationalized Bank and PAN card number to be submitted by bidder.

1.8. **COMMERCIAL:**

- 1.8.1. Bidder shall submit the offer under "Single Stage Single Bid System" "Technical bid" and the "Price Bid".
- 1.8.2. The Integrity Pact as per Section-V has to be submitted/uploaded by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. A bid submitted without integrity pact will be summarily rejected.
- 1.8.3. The Technical Bid should not have any price indication.
- 1.8.4. Bidder shall upload Bid Security Declaration as referred in Relevant Section of the Bid document along with technical bid. Any bid for which bid security declaration is not received before due Date of Bid Closing will be rejected.
- 1.8.5. Validity of the bid shall be minimum **90 days**. Bids with lesser validity will be rejected.
- 1.8.6. Any bid received in the form of Telex/Cable/Fax/E-mail/ Telephone call will not be accepted.
- 1.8.7. Bidders must quote clearly and strictly in accordance with the price schedule outlined in relevant section of Bidding Documents; otherwise the bid will be rejected.
- 1.8.8. Any bid containing false statement will be rejected.
- 1.8.9. The Bid Documents are not transferable. Bids made by parties who have not purchased the Bid Documents from the Company will be rejected.

- 1.8.10. Any Bid received by the Company after the deadline for submission of bids prescribed by the Company will be rejected.
- 1.8.11. Price quoted by the successful Bidder must be firm during the performance of the Contract and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- 1.8.12. The following Clauses with all its sub-clauses should be agreed in toto, failing which the bid will be rejected. To this effect Bidder shall submit an undertaking along with the Technical Bid.
 - a) Performance Security Clause
 - b) Force Majeure Clause
 - c) Termination Clause
 - d) Settlement of disputes Clause
 - e) Liquidated Damages Clause.
 - f) Acceptance of Jurisdiction and applicable law.
 - g) Tax liabilities clause.
 - h) Insurance clause.
 - i) With holding clause.
 - j) Liability clause.
 - k) Set off clause

1.9. GENERAL:

- 1.9.1. In case Bidder takes exception to any clause of Tender Document not covered under BEC/BRC, then the Company has the discretion to load or reject the offer on account of such exception if the Bidder does not withdraw/ modify the deviation when/as advised by the Company. The loading so done by the Company will be final and binding on the Bidders. No deviation will however, be accepted in the clauses covered under BEC/BRC.
- 1.9.2. To ascertain the substantial responsiveness of the bid the Company reserves the right to ask the Bidder for clarification in respect of clauses covered under BEC/BRC also and such clarification fulfilling the BEC/BRC clauses must be received on or before the deadline given by the Company, failing which the offer will summarily be rejected.
- 1.9.3. In case, any of the clauses in the BEC/BRC contradict with other clauses of Bid Document elsewhere, then the clauses in the BEC/BRC shall prevail.
- 1.9.4. Bidder shall fulfill all the relevant clauses applicable for this e-Tender.
- 1.9.5. The original copy of documents [submitted by bidders(s)] shall have to be produced by bidder(s) to OIL as and when asked for.

2. BID EVALUATION CRITERIA (BEC):

2.1. The bids conforming to the technical specifications, terms and conditions stipulated in the bid documents and considered to be responsive after subjecting to the Bid

Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria.

- 2.2. To ascertain the inter-se-ranking, the comparison of the responsive bids will be made on the basis of total amount quoted for the items of SOQ.
- 2.3. Quoted rates must be in conformity with the applicable minimum wage as applicable otherwise bid will be rejected. The original rates quoted by the bidders will not be allowed to increase under any circumstances.
- 2.4 Original Bid closing date will be considered for evaluation of BRC criteria even in case of any extension of the original Bid Closing Date.

SCOPE OF WORK, PAYMENT TERMS AND SPECIAL TERMS & CONDITIONS

Terms and conditions of the contract shall include but not limited to the following:

Scope of works:

CONSTRUCTION MANAGEMENT SERVICES FOR PIPELINE LAYING AND ASSOCIATED SERVICES FOR REPLACEMENT OF 8" SPUR LINE FROM PS1, DULIAJAN TO DIGBOI REFINERY UNDER PIPELINE DEPT., OIL INDIA LIMITED FOR A PERIOD OF 12 MONTHS (EXTENDABLE BY 12 MONTHS)

SCOPE OF WORK

OIL is operating 200 NB (8 Inch diameter), 35 Km long buried Crude Oil spur line from Pump Station - 1, Duliajan to Digboi Refinery with one intermediate pigging station and a receipt terminal at Digboi Refinery since 1958. This pipeline is routed through a pipeline corridor along with other oil & gas flow lines, mostly along Digboi — Duliajan road. Now, the company is replacing this pipeline with new one, complying to required statutory norms. One OFC duct with cable will be laid in the same pipeline trench. Construction of some portion of the pipeline has been completed and remaining portion mostly under Forest jurisdiction will be started shortly.

Being a replacement project, OIL has carried out major portion of engineering and procurement for the project of its own. However, for Construction Supervision and Quality Control of the pipeline laying and associated activities, OIL intend to hire services for Construction Management.

In Forest portion, pipeline laying works may be carried out by contractor directly engaged by OIL or by other contractor engaged by other organization on behalf of OIL. In some portion, 8-inch crude oil pipeline & OFC may be laid in the same trench with other hydrocarbon pipeline (to be newly laid). Construction supervision of OIL's pipeline system will only be in the scope of this contract.

(A) BRIEF SCOPE OF WORK

As a *Construction Management Service Provider* for the job, the agency shall act as an extension of the Owner, always keeping in view Owner's interests and advising/guiding the Owner on all important matters and ensure that the project is completed within specified cost and time with quality deliverables.

The route of the pipeline is mostly along Duliajan-Digboi Road with certain detour portions at Duliajan, Bhadoi and Digboi area. Total length of the pipeline will be approximately 37.5 km. 3 LPE coated API 5LX46 grade line pipes have already been procured. Pipeline will be laid underground, complying to OISD 141 standard and following industry best practices. OFC duct with cable will be laid in the same trench of the pipeline. Installation of temporary Cathodic protection is in the scope of pipeline laying contractor. Route survey for the entire pipeline route has already been carried out. Part of pipeline laying under the project has been completed.

The scope of work of the *Construction Management Service Provider* is broadly defined under the following heads however the list is not exclusive/exhaustive. The service provider shall also be required to do the works not envisaged herein and specifically mentioned below, but otherwise required for overall completion of the project as Construction Manager, within the quoted price/awarded value of work to the Construction Management Service.

- a) Initial Site visit
- b) Review of owner's data (technical documents, survey reports, reports related to already executed works etc.)

- c) Preparation of drawings and Project Document Index, as required
- d) Design and engineering of minor works related to Pipeline laying and Civil & Structural works
- e) Planning of detailed activities and Scheduling
- f) Liaison for Permissions from authorities as per site requirements
- g) Preparation of item wise cost estimate, as required
- h) Preparation of Specifications, Work Procedure, SOP, Quality document (QA/QC)
- i) Procurement, Inspection and Expediting of Materials.
- j) Materials Management
- k) Construction Management and Supervision
- 1) Construction Risk Analysis and formulation of mitigation plan
- m) Establish Quality Management System and ensure Quality control as per approved Quality Assurance plan
- n) Information management related to construction
- o) Health & Safety Management System complying with Statutory, Regulatory and National & International Standards.
- p) Measurement, Certification and forwarding the vendors bills to Owner within stipulated time
- q) Review and approval of 'As Built Documents/Drawings'.
- r) Lodging of Insurance claims and realization of the same
- s) Maintaining Hindrance Register
- t) Performance evaluation of Vendor (s)/ Contractor (s)
- u) Pre-commissioning and Commissioning of Pipeline system
- v) Pipeline laying contract close-out
- w) Assistance to client to resolve disputes

The Construction Management agency shall work with the aim to complete the Pipeline laying & commissioning works on or before the schedule, within the stipulated cost and shall follow all relevant & applicable international/national codes and standards.

(B) DETAIL SCOPE OF WORK

1.0 Site Visit

- a) Construction Management agency shall carryout site visits of ROW, Pump Station, Terminal and Repeater station with Owner's personnel for assessing the ROW condition and corelate/supplement the same with the data made available by the owner to have a correct assessment of the ROW, infrastructure availability, approach roads for movement of men, material and heavy equipment to the site and other details as required. No separate ROW survey either by the Construction Management agency or owner is envisaged.
- b) All expenses of the Construction Management agency including transportation, accommodation of Agency's personnel shall be to Agency's account.

2.0 Review of Data and Initial Studies

- a) Review the owner's data and documents (ROW/ROU Data, GIS Data, survey reports etc.) with regards to the pipeline system.
- b) Review the Pipeline Alignment Sheets
- c) All pipeline laying documents in regards to pipeline laying works already completed.

3.0 Preparation of drawings and Project Document Index, as required

The Construction Manager shall develop field drawings and documents as required and generate necessary indexing.

4.0 Design and engineering

Design and engineering for the Pipeline Laying has been carried out by OIL. Construction Manager shall carry out some other minor design requirements as per site necessity. No extra cost shall be charged to OIL for such design.

5.0 Planning of detailed activities and Scheduling

As a CONSTRUCTION MANAGER for the job, the agency shall act as an extension of the Owner, always keeping in view the Owner's interests and advising/guiding the Owner on all important matters and ensure that the project is completed within specified cost and time with quality deliverables.

The CONSTRUCTION MANAGER shall be completely responsible for preparing construction plans and schedules in line with the Overall Construction Schedule provided by the owner. Construction Manager shall evaluate Contractor's resource requirement for each activity and monitor actual deployment in field.

Construction Manager shall prepare schedule for bought out materials by the contractor for timely delivery at site and monitor actual status.

Construction Manager shall generate weekly and monthly Construction Progress statistics in percentage basis considering various major activities to be executed under the Pipeline Construction and Laying tender and assigning suitable weightage.

6.0 Permissions from Authorities

- a) Reviews of approvals obtained by the owner from various external Authorities and conforming necessary compliance as required by the relevant approval.
- b) Construction Manager shall interact with locals/ villagers/ Gram Panchayats for obtaining necessary permissions (if any) during physical execution. However, local issues arising during the execution of job by the Works Contractor (viz. damage to village roads/ crop damage outside RoW etc), shall be the responsibility of Works Contractor and CONSTRUCTION MANAGER shall ensure that the job progress is not hampered.
- c) Provide technical support, data & drawings that are required to highlight design, specification and drawings to be submitted to the concerned authorities.

7.0 Cost Estimation

For any extra/ supplementary item requirement not mentioned in the Pipeline Laying tender, Construction Manager shall

- a) Prepare cost estimate and submit to owner, including basis for cost estimate
- b) This cost estimate shall include all factors of major cost significance and shall be complete with necessary documentation to support the cost estimate.
- c) Preparation of accurate estimates in time (based on past data/ CPWD basis/ local state Schedule of Rate / Market rate Analysis)/ Oerheads for procurement items and works is an important activity in Cost Estimation.

8.0 Work procedures, Specifications, Drawings & Standards, Quality document (QA/QC)

The CONSTRUCTION MANAGER shall establish and submit to Owner, work procedures, SOPs, standards and codes in line with National/International standard for all major and critical activities of Pipeline Laying and associated activities covering required HSE aspects.

The Construction Manager shall

- a) Establish Quality Plan, QC procedures/table for activities involved in the scope.
- b) Establish a Quality Plan for bought out items for acceptance levels of project.

c) Establish final acceptance level. Define acceptance criteria before taking over the pipeline system from Works contractor.

The Construction Manager shall generate necessary formats for checklist, documentation and records as per standard documentation practice adopted by the industry.

The Construction Manager shall review and grant approval of design/drawings/ documents for material supply and work execution as submitted by vendors/ contractors/ suppliers.

9.0 Procurement, inspection and expediting of Materials

The CONSTRUCTION MANAGER shall rigorously monitor purchase of bought out materials as required for execution of the works contract. Construction Manager shall adequately guide the contractor regarding material specifications, sources for purchase, quality assurance plans, inspections etc.

The Construction Manager shall carry out necessary inspection of bought out materials related to works contracts at Factory and Site as per instruction of owner.

For bought out items, the Construction Manager shall rigorously monitor manufacturing status to ensure timely delivery of materials at site.

For any additional material requirement outside the present scope of Pipeline Laying contract, the Construction Manager shall assist client/ vendor for purchasing the same.

10.0 Materials Management

The Construction Manager, on behalf of the Owner, shall issue Free Issue Materials to the Contractor. All necessary documentation till final reconciliation shall be carried out by the Construction Manager.

For bought out materials by Contractor, the Construction Manager shall Inspect incoming materials for quality, quantity, test certificates, other documents and records. Necessary Inspection Reports shall be generated, reviewed and approved.

The Construction Manager shall receive unused material returned by the contractors and hand over the same to the owner along with reconciled statement, Inspection Certificates and documents.

11.0 Construction Management and Supervision

- (i) Review contractor's resources, procurement schedules and construction schedules
- (ii) Prepare and implement all necessary procedures to ensure compliance to HSE norms for safety of personnel working in field activities /field inspection /testing. Also ensure that all precautions and safety measures required to be adopted while working in RoW having live hydrocarbon pipelines are fully adhered to.
- (iii) Ensure adherence to established work procedures/specification
- (iv) Ensure all personnel working adjacent to live pipelines are fully aware of the various safety hazards.
- (v) Deploy necessary expert manpower at site for Overall Management, HSE, Quality Control, Planning & Co-ordination, Material Management etc.
- (vi) Carryout supervision activities based on the established work procedures.
- (vii) Inspect & supervise the work as per established Quality Assurance Plan and check conformity as per the established Quality Control standard. CONSTRUCTION MANAGER shall certify the same through formats.
- (viii) Carryout progress measurement, scrutiny, works certification of contractor's bills for payments. CONSTRUCTION MANAGER shall forward duly certified bills to OIL for payment without undue delay.
- (ix) Organize Meetings with Stakeholders as required for Construction Management.
- (x) Review and certify as built drawings to be prepared by respective Work Contractors.

- (xi) Requirement of Deviations, extra items/ work, time extension if any, of the Works contractors shall be analyzed and the recommendations shall be forwarded to Owner for approval.
- (xii) Process recoveries from Works Contractor(s) for issue of Owners materials, hire charges, rents and taxes etc. as per provision of the contracts.
- (xiii) Initiate action for arranging services of vendor's specialists if required during the execution of the Works Contract.
- (xiv) Monitoring of Works contractor's logistics for material delivery & Storage etc. and ensure mobilization of additional resources by Works Contractor without any cost implication to make-up for any slippage.
- (xv) CONSTRUCTION MANAGER shall regularly monitor compliance of all Acts and regulations (viz. Factories Act, Mines Act, Minimum Wages Act, Workmen's Compensation Act, Payment of Wages Act, Payment of Bonus Act, Contract Labour Act, EPS, EPF, Workmen Insurance, Labour Clearance etc.) by the Works Contractors. Construction Manager, on behalf of owner, shall carry out all necessary verification/ inspection and shall maintain documentation, as required.
- (xvi) Construction Manager shall be responsible for resolution and submission of recommendations with analysis on extra claims/ disputes/ arbitration cases raised by the contractors/ vendors. Final acceptance/ settlement shall be taken care of by Owner.

For the period up to 12 (Twelve) months after the completion of the project, the CONSTRUCTION MANAGER shall provide such assistance from his Home Office at no extra cost to Owner. In case any visit is to be undertaken by CONSTRUCTION MANAGER's personnel related to such services, travel related expenses shall be reimbursed by Owner at actual.

However, in case Owner desires any such services from CONSTRUCTION MANAGEMENT SERVICE PROVIDER beyond 12 months after contract completion, CONSTRUCTION MANAGER shall provide the same on per-diem rate reimbursable basis, wherein if any travel is required travel related expenses shall be reimbursed by Owner at actual.

- (xvii) All Boarding, lodging, transportation, Resident/Site/camp office, office infrastructure, required by the CONSTRUCTION MANAGER for execution of the job shall in Construction Management Agency's scope. If Owner provides such spare facilities, rent will be charged as per established norms of Owner.
- (xviii)Resident Construction Manager (RCM) shall be responsible for all the activities related to work at site including assistance to Owner for liaison with local authorities.
- (xix) Construction Manager shall generate Daily, Weekly and Monthly Progress Reports, monthly HSE reports, material reconciliation report etc. as required for Construction Management.

12.0 Construction Risk Analysis and formulation of mitigation plan

Construction Manager shall prepare a Risk Management plan along with Risk Register for Construction, Pre-commissioning and Commissioning activities and detailed Risk Analysis (Qualitative as well as Quantitative). Construction Manager shall formulate suitable mitigation plan and integrate the same with Owner's existing Disaster Management Plan.

13.0 Quality Management System and ensuring Quality control

Construction Manager, on behalf of owner, shall carry out all quality control and management for the pipeline construction and associated services including purchase of bought out materials, consumables etc. by the contractor. All necessary work procedures and purchase specifications (for bought out materials) are to be established as per the Tender document for Pipeline Laying Tender for the subject job conforming to National and International standards in practice.

Construction Manager shall review and approve above work procedures and specifications.

Construction Manager shall ensure compliance of the work procedures and specification during execution.

Construction Manager shall ensure compliance of calibration requirement of all testing and measuring equipment.

Construction Manager shall ensure documentation as per approved formats and approved all accepted documents.

14.0 Information management related to construction

- i) Construction Manager shall prepare monthly progress reports for the project and provide all assistance to the Owner for preparing-MIS reports required by the Owner for submission to concerned authorities/ Ministry Monitoring cell. Submission of all documents, reports, presentations, queries from Ministry needs to be prepared and submitted on time.
- ii) Construction Manager shall generate Daily, Weekly and Monthly Progress Reports, material reconciliation report etc. as required for Construction Management. As a minimum the following information shall be available in the monthly report
 - a)Project status report
 - b) Progress on Procurement of bought out materials
 - c)Progress on Construction work
 - d) Status of Quality reporting
 - e)HSE report
 - f) Status of pending activities along with action plan
- iii) Attendance of CONSTRUCTION MANAGEMENT AGENCY's Manpower shall be recorded and routed through Owner's Engineer in Charge/ Authorized personnel and certified by Resident Construction Manager.
- iv) Preparation of a look-ahead model/ catch-up plan for the project from time to time and ensure mobilization of adequate resources.
- v) Highlight pitfalls, if any, caused by the Vendors/ Contractors / any agency hindering execution of the project,
- vi) Identifying the root causes of the problems/ shortcomings encountered in material delivery and Construction activities.
- vii) Prepare contract close out report, including performance report of contractor (s).
- viii) Apart from the above deliverables, CONSTRUCTION MANAGEMENT AGENCY shall be required to submit other documents in the form of reports, as deemed necessary for successful and timely project implementation.

15.0 Management of Health & Safety Management System

It is Owner's objective and policy to ensure that potential health and safety factors and environmental effects are assessed for all products, project activities and acquisitions. For projects this is implemented by staged audits of health, safety and environmental aspects from concept stage to completion in order to determine any shortcomings or noncompliance.

The specific requirement includes the following:

15.1 Safety Review

A formal safety review shall be carried out periodically by Owner and CONSTRUCTION MANAGER, integrated across various activities. Owner's review team shall require data, input from key personnel from contractors and access to all locations being used by contractor (s). CONSTRUCTION MANAGER shall make all necessary arrangements for such reviews as required by Owner and shall ensure that contractors make available such data, personnel and locations as required. CONSTRUCTION MANAGER shall ensure that all recommendations and findings from safety reviews are implemented by contractors in a timely manner.

15.2 Environmental Impact Assessment (EIA) and Group Risk Assessment (GRA)

Owner has carried out EIA study for the proposed Pipeline Construction and laying work through competent service provider. CONSTRUCTION MANAGER shall conduct GROUP RISK ANALYSIS (GRA) for critical activities related to pipeline construction activity adjacent to live pipelines and ensure that all recommendations resulting from the EIA/GRA studies related to construction activities, on approval by owner, are implementation by contractor. CONSTRUCTION MANAGER shall provide scrap disposal management system in line with State/ Central PCB norms and ensure strict compliance by contractor/ subcontractor. The purpose of this is to prevent any accidents, incidents or events that could result in degradation/deterioration of the environment.

15.3 Health, Site Safety and Security

CONSTRUCTION MANAGER shall be responsible, on behalf of owner for ensuring a high standard of occupational health and site safety management and for ensuring the requirements for health, safety and security to be maintained by contractors, subcontractors and other personnel working at site. CONSTRUCTION MANAGER shall ensure compliance of the safety requirement by the contractors.

The purpose of these safety requirements shall be to prevent any accidents, incidents or events that could result in injury or fatality to personnel and/or damage or destruction to property, equipment and material of contractors, subcontractors or CONSTRUCTION MANAGER, owner or third parties. The requirements shall be intended to supplement any Statutory Authority/State/Municipal/local or other regulations applicable to the site, which CONSTRUCTION MANAGER shall be obliged to enforce on behalf of Owner. CONSTRUCTION MANAGER shall agree with Owner's representative at site for any variation in these requirements. CONSTRUCTION MANAGER shall monitor reports and ensure that the above requirements are fully adhered.

15.4 Site Safety Organization

CONSTRUCTION MANAGER shall appoint a Safety Engineer, whose responsibility is to monitor all safety activities on the job and report the findings. The Safety Engineer shall make safety inspections of the job site. The inspections should be made jointly with the Safety officer/ In-charge of the contractors responsible for ongoing work in the areas to be inspected. Any infractions or poor safety practices uncovered by these inspections shall be promptly corrected. Safety requirements shall be enforced on all the contractors and subcontractors.

15.5 Site Safety Planning

Prior to start of site works, CONSTRUCTION MANAGER shall plan job safety requirement in conjunction with contractors giving due consideration to:

- i) Owner's / CONSTRUCTION MANAGER's Safety requirements
- ii) Statutory requirements
- iii) Risks/Hazards involved in working adjacent to high pressure live hydrocarbon pipelines
- iv) Location of job site(s)
- v) Type, background and quality of labour resources and anticipated training programs
- vi) Nature of work, types of hazards anticipated and hazard prevention methods
- vii) Inspection & testing activities, implementation and ensure compliance to work permit system.
- viii) Equipment and material to be used.
- ix) Specific safety requirement for working in Forest area
- x) Barricading of open trench, barricading during Radiographic Testing etc.

- xi) The number of personnel working concurrently in any area at the same time.
- xii) Personal protective equipment (PPE) requirements. CONSTRUCTION MANAGER shall ensure that contractors ensure availability and usage of PPE during work execution.
- xiii) All specific guidelines issued by Forest authorities in regards to the works within Forest area

15.6 Site Safety Guidelines

Prior to start of work at each job site, CONSTRUCTION MANAGER shall ensure publicity of safety guidelines, safety bulletin, Dos & Don'ts about Safety through site contractor to cover safety activities. CONSTRUCTION MANAGER shall suggest and ensure installation of Safety board and barricading tapes at appropriate places at site. The matter for safety slogans for display shall also be suggested by CONSTRUCTION MANAGER.

The contents of the safety manual shall include, as a minimum the following:

- (i) Owner's & CONSTRUCTION MANAGER's safety organization, philosophy and responsibilities.
- (ii) Owner's & CONSTRUCTION MANAGER's safety requirement
- (iii) The general safety rules applicable to the job site
- (iv) Safety precautions and safety measures which are required when working with high pressure live hydrocarbon pipelines
- (v) The requirements and availability personal equipment for specific activities at job site.
- (vi) Traffic regulations at the work sites
- (vii) Requirements and standards for use of scaffolding/ladders
- (viii) Safety precautions and safety measures which are required when working in pipeline trench
- (ix) Requirements for grounding electrical equipment and tools
- (x) Type, availability and responsibility for use of firefighting equipment;
- (xi) Work permit procedures
- (xii) Procedures to be followed when an accident, injury or fire occurs;
- (xiii) Procedure to be followed by entire contractor's organization should major accident occur;
- (xiv) Control access to site

15.7 Preparation of Emergency Action Plan

The CONSTRUCTION MANAGER shall prepare the Emergency Action Plan for Site by integrating with Owner's existing Disaster Management Plan in-line with the requirements of statutory authorities, OISD, PNGRB and other safety norms. The same shall be handed over to Owner for approval and subsequent circulation.

15.8 Safety Activities

CONSTRUCTION MANAGER shall ensure that contractors/ subcontractors carry out their activities in accordance with the safety plan throughout the course of the construction of the project to inculcate and maintain safety awareness among their personnel. If necessitated, each personnel, prior to beginning work, shall be given a safety orientation course. CONSTRUCTION MANAGER shall be responsible for arranging and providing such trainings and ensuring consistency of knowledge and understanding across all work groups. All personnel must be fully aware of the potential hazards involved in the work they supervise and the safe practices to be followed while working adjacent to high pressure live

hydrocarbon pipelines. CONSTRUCTION MANAGER will be responsible for execution of works by following all safety measures and ensure no deviation is taken in adopting safety standards, at any cost during construction.

15.9 Accident Reporting and Investigation

Any accident or incident resulting in a lost time injury, death of person, or damage to property or equipment is to be investigated by CONSTRUCTION MANAGER. Every incident shall be documented properly after the incident including the results of investigation and recommendations for preventive action. CONSTRUCTION MANAGER shall also ensure that all necessary publicity is given, across all sites, to ensure that such incidents do not occur in future. This investigation and report shall not preclude any similar investigations and reports required by government regulation.

CONSTRUCTION MANAGER shall maintain safety performance and accident statistics records for the whole site in conformance to the international standards. Updated safety performance and accident statistics shall be included in CONSTRUCTION MANAGER's every monthly report.

16.0 Measurement, Certification and forwarding the vendors bills

Construction Manager shall carry out physical measurement of executed quantity of work, qualified and accepted for billing in Measurement sheet format. Relevant documentary proof must be thoroughly verified by competent personnel of Construction Manager before forwarding bills for payment. Payment terms mentioned in the Contract for Contractor's relevant work shall be complied while billing.

For supply items, relevant Material Inspection documents (TPI and Construction Manager, as applicable) shall be thoroughly verified.

Construction Manager shall also verify other relevant documents (to be submitted along with bills) such as Insurance, PF etc. as per tender document for 'Pipeline Laying works'.

Construction Manager shall forward the bills to the Owner, duly verified and certified for payment, within the stipulated time from the date of receipt.

Construction Manager shall maintain records of bills for future reference.

17.0 Review and approval of 'As Built Documents/ Drawings'

Construction Manager shall arrange to generate 'As Built Documents/ Drawings' as per contract/ tender terms for 'Pipeline Laying Tender', verify the same, make necessary corrections and forward the same to owner as final documentation for acceptance.

All such final drawing/ documents shall be submitted in hard copies as well in soft copies.

18.0 Lodging of Insurance claims and realization of the same

Construction Manager shall provide complete assistance in Lodging of Insurance claims and realization of the same. It shall be the Construction Manager's responsibility to carry all the technical & coordination works for lodging of insurance claims and assistance in realization of these claims from the insurance agencies. However, taking of insurance policies and payment of its premium would be in the scope of Owner.

19.0 Maintaining Hindrance Register

During work execution, Construction Manager shall maintain all records of ROW/RoU obstruction/ hindrances with due justifications in the format provided by Owner.

20.0 Performance evaluation of Vendor (s)/ Contractor (s)

As per requirement of Owner, Construction Manager shall

- Carry out the vendor performance evaluation of vendors/contractors.
- Along with the order/contract closing statements, PMC shall also provide performance evaluation report of all the vendors/ contractors.

21.0 Pre-commissioning and Commissioning of Pipeline system

Construction Manager shall provide all necessary management service for pre-commissioning and commissioning of the new pipeline, including hook-up works, crude oil evacuation from old pipeline, disposal of water, commissioning of the new pipeline, pre-commissioning and commissioning of OFC cable systems, execution of restoration works etc.

22.0 Pipeline laying contract close-out

Consequent upon the successful completion of the Pipeline construction and laying works, the CONSTRUCTION MANAGER shall be responsible for following:

- (i) Settling Final Bill (s).
- (ii) Follow up with vendors and contractors for as-built drawings/ documents in required editable soft and hardcopies, review/approve the same and forward to Owner.
- (iii) Submission of all project related documents to Owner for future reference and records as per standard international practice.
- (iv) <u>Submission of final documents</u> in required soft and hardcopies format shall be under the following heads:
 - a) As built drawings
 - b) As built pipeline alignment sheets
 - c) All Construction documents like field reports, QC, RT, UT
 - d) Pipebook
 - e) Chainage wise Block Valve with coating details
 - f) Chainage wise details of Pipeline repair, if any
 - g) Chainage wise details of crossings
 - h) Chainage wise details of Type of TLP installed
 - i) TCP commissioning report with as built drawings
 - i) CP Survey reports
 - k) OFC laying documentation as per tender document
 - 1) Contract Closeout Report incorporating the following
 - Contract brief
 - Chronology of Activities
 - CONSTRUCTION MANAGER's Office Organogram
 - Names of CONSTRUCTION MANAGER Personnel working for the project along with all contact details.
 - Pipeline Spread details, with details of Works contractor
 - List of key milestones and date of actual achievement.
 - List of POs/ WO's including vendors / contractors name and contact detail (if applicable)
 - Lesson learnt: Report on problems faced during the project execution and mitigation measures taken for future reference.
 - Submission of all evaluation sheets of performance for all vendors and contracts in line with established procedures on whom orders were placed.
 - Construction Photographs and videos with time stamp

23.0 Assistance to client to resolve disputes

Assistance to client to resolve disputes as they arise and, should a dispute become intractable, assistance to client to compile all necessary reports, documents and evidence needed for presenting its claim to arbitration

24.0 Exclusion from Construction Manager's Scope

The following are excluded from scope, however, all technical assistance shall be provided by Construction Manager:

- (i) Acquisition of land
- (ii) Project insurance shall be taken by Owner, however, assistance in lodging of insurance claims and realization of the same shall be done by CONSTRUCTION MANAGER.
- (iii) Statutory clearances (however extending support is the responsibility of CONSTRUCTION MANAGER)

25.0 Addition, Reduction in scope and Re-Tendering

- (i) Addition/ reduction of CONSTRUCTION MANAGER fees would be considered in case of addition (certain extra activities not envisaged in the original scope of work) or deletion in the scope of the project.
- (ii) Change in drawings / documents due to site conditions is to be carried out by the CONSTRUCTION MANAGER without any extra cost to Owner.
- (iii) In case Construction Manager is required to execute certain extra activities not envisaged in the original scope of work, then Construction Manager shall submit to the Owner, the detailed scope of work along with estimated man-hours and the additional time if required. Man-hours and extra time schedule shall be mutually agreed between the Owner & Construction Manager.

26.0 Other Conditions:

- (i) CONSTRUCTION MANAGER shall perform the work under this CONTRACT with diligence and conforming to the best international practices available.
- (ii) CONSTRUCTION MANAGER shall perform their obligations conforming to rules, regulations and procedures prescribed by law/Statues.
- (iii) CONSTRUCTION MANAGER shall be responsible for ownership of the design engineering, patent etc.
- (iv) CONSTRUCTION MANAGER shall suggest measures to cut-down cost and time over run without compromising the quality of work required in implementing the project.
- (v) CONSTRUCTION MANAGER should intimate in advance any owner's obligations for timely completion of activities (e.g.) requirements of statutory norms, regulatory authorities etc.
- (vi) CONSTRUCTION MANAGER shall provide all necessary documents in time to the contractor for commencing and proceeding with the work as per agreed schedule.

(C) CONSTRUCTION MANAGEMENT AGENCY'S MANPOWER

- **1.0** CONSTRUCTION MANAGER shall deploy required number of qualified and experienced personnel e.g. professional engineers, subordinate engineering personnel, construction supervisors, inspection engineers and other specialists of appropriate levels to ensure:
 - Quality at all stages and aspects as per requirement of codes, standards, specifications and best international practices
 - Timely & expeditious completion of the Pipeline Construction
 - Economize expenses.

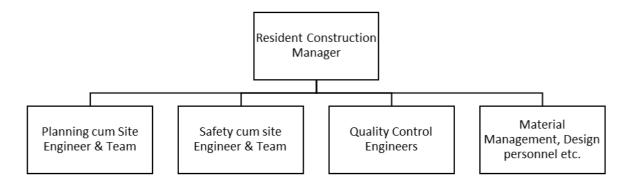
- **2.0** CONSTRUCTION MANAGER shall submit the following for approval of the Owner after award of LOA
 - Organogram
 - Manning schedule
- **3.0** The Resident Construction Manager (RCM) shall be required to be deployed from the date of Start of Contract till closure of the construction contract/ Owner's Written Intimation.
- 4.0 CONSTRUCTION MANAGER shall ensure optimum utilization of the deployed manpower such that no person is idle. In order to expedite progress, within same scope of work, CONSTRUCTION MANAGER may be required to augment with more manpower. CONSTRUCTION MANAGER's deployment of manpower shall be reviewed during Progress Meetings.
- **5.0** Substituting of CONSTRUCTION MANAGER's personnel (if any) with other personnel will be done with either same level & experience or higher level & experience.
- 6.0 Construction Manager shall deploy qualified personnel as per activity requirement of Pipeline Construction and Laying works. However, before mobilizing such personnel, written advice/clearance from Owner shall be obtained. Also, when there is no/reduced site activity, Construction Manager shall demobilize its personnel as per written advice/clearance from Owner.
- **7.0** The Construction Manager shall mandatory submit the following before deployment
 - a) Bio-Data with qualification and experience of Resident Construction Manager proposed for the work.
 - b) Bio-Data with qualification and experience for all personnel under Resident Construction Manager shall be submitted to Owner for review and approval prior to their deployment.
- 8.0 The CONSTRUCTION MANAGER shall be required to depute qualified and experienced manpower for the execution of the service. CONSTRUCTION MANAGER shall ensure that the complete manpower whose names have been proposed to be engaged for the service is not changed during execution. In case of any change in deployment, the CONSTRUCTION MANAGER shall submit bio data of the substitute manpower proposed and take Owner's approval. The various categories of manpower with Qualification and experience required to be engaged for the service are detailed as under:

Qualification and Experience

Sl. No	Type	Qualification & Knowledge	Experience
1.	Resident Construction Manager	pertaining to construction of pipelines, Industry accepted Best	Overall Experience: At least 12 years of experience in executing projects in Hydrocarbon Industry i.e. Hydrocarbon Process Plants, Pipelines (Hydrocarbon/ Crude / Oil / Gas), Petrochemical Plant, LPG Plant, Refinery etc. Mandatory Experience: Out of the 12 years of experience, at least 6 years of experience shall be in works related to construction of hydrocarbon pipeline projects.
2.	Planning cum Site Engineer	Degree in any Engineering Knowledge of Planning & Scheduling for projects related to hydrocarbon industry, pipelines.	Overall Experience: At least 3 years of experience in executing projects in Hydrocarbon Industry i.e. Hydrocarbon Process Plants, Pipelines (Hydrocarbon/ Crude /

Sl. No	Type	Qualification & Knowledge	Experience
		Familiar with latest software in planning. Knowledge of various activities related to execution of pipeline projects	Oil / Gas), Petrochemical Plant, LPG Plant, Refinery etc. Mandatory Experience: Out of the 3 years of experience, at least 1 year of experience shall be in execution of hydrocarbon pipeline projects.
3.	Safety cum Site Engineer	Degree in Engineering in any Discipline/ Diploma in Fire Engineering & Safety Management Knowledge of safety standards, Acts & Regulations, Best Industrial practices in HSE and safety aspects considered for construction of oil & gas pipeline projects.	Overall Experience: At least 3 years of experience for Degree holder/ 5 years of experience for Diploma holders in Hydrocarbon Industry i.e. Hydrocarbon Process Plants, Pipelines (Hydrocarbon/Crude / Oil / Gas), Petrochemical Plant, LPG Plant, Refinery etc. Mandatory Experience: Out of the required years of experience, at least 50% of experience shall be in execution of hydrocarbon pipeline projects.
6.	Quality Control (NDT) cum Site Engineer	Degree in Engineering in any Discipline. Should have valid ASNT NDT Level-II (Radiographic Testing)	Overall Experience: At least 3 years of experience in Hydrocarbon Industry i.e. Hydrocarbon Process Plants, Pipelines (Hydrocarbon/ Crude / Oil / Gas), Petrochemical Plant, LPG Plant, Refinery etc. Mandatory Experience: Out of the 3 years of experience, at least 1 year of experience must be in works related to pipeline.

9.0 A recommended structure for CONSTRUCTION MANAGER's manpower is as under:



- i) All costs related to Site Office Establishment, Vehicle, Office Operation, Accommodation, Construction Manager's Manpower etc. are in Construction Manager's scope.
- ii) Minimum One number of vehicle shall be arranged by the Construction Manager for movement between Duliajan to Digboi and areas falling within Dibrugarh and Tinsukia districts.
- iii) Subcontracting of Petty Services against this tender/ contract is not allowed.

PAYMENT TERMS

1 General

The terms and mode of payment shall be as per details given below and as per the relevant clauses of GCC, ITB & SCC as applicable.

Payment shall start only after signing of Contact Agreement as per Tender document & receipt and confirmation of contract cum performance Bank Guarantee.

Prices shall be as per the Price Schedule Format. Statutory variation in taxes, if any, within the contractual completion period shall be borne by owner. Any decrease in the rate of taxes and duties shall be passed on to the owner. No variation in taxes duties or levies other than Goods & Service tax shall be payable.

2 Terms & Mode of Payment

- a) OIL will not pay any advance payment.
- b) House Rent, Electricity charges etc. will be charged as per OIL's internal rate, if such facilities are availed from OIL.
- c) All costs for deployment of manpower at site including conveyance, accommodation, telephone, PF, Insurance, medical, safety PPEs, other benefits etc. are included in the man-month rate.
- d) Monthly attendance sheet duly certified by RCM will be submitted along with RA Bill.
- e) The CONTRACTOR has to raise the RA bill on monthly (minimum)/ quarterly (maximum) basis and payment shall be made as per the following terms:

For all SOR items

- i) 95 % progressively on completion of work as certified in RA bill.
- ii) 5 % after acceptance of final bill at the end of the contract
- f) Payment shall be made through RTGS/NEFT.
- g) Owner has the right to process the payment with certain deviations or retention with sufficient justifications. Decision of the owner in this regard shall be final and binding.
- h) Quantities given in the price bid format may deviate during execution. Contractor shall raise bill as per actual amount of work executed and payment will be processed for certified quantities. Contractor shall execute any such deviated quantity as per site requirement.
- i) PF amount deposit proof will be submitted along with monthly invoices. Relevant GCC clause to be referred.

3 Penalty

In case of delay in mobilization of personnel as per requirement intimated in writing within 15 days from the date of intimation, 2% of per day rate against the respective contract item will be deducted for each day of delay starting from 16th day.

SPECIAL CONDITIONS OF CONTRACT

1.0 GENERAL

- a) Special Conditions of Contract (SCC) shall be read in conjunction with the General Conditions of Contract (GCC), Specifications of Work, Drawings and other documents forming part of this contract wherever the context so requires.
- b) Notwithstanding the sub-division of the documents into these separate parts and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the contract in so far as it may be practicable to do so.
- c) Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears, the provisions of the special Conditions of Contract shall be deemed to over-ride the provisions of
- d) The General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.
- e) Wherever it is mentioned in the scope of work that the contractor shall perform certain jobs such as assessment, inspection or travel, accommodation etc., it is understood that the contractor shall do so at his cost and the value of contract shall be deemed to have included cost of such performance and provisions so mentioned.
- f) The materials, tools, machineries and workmanship shall satisfy the relevant Indian Standards, the Job Specifications contained herein and Codes referred to. Where the job specification stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.
- g) In case of an irreconcilable conflict between Indian or other applicable standards, General Conditions of Contract, Special Conditions of Contract, Scope of Work or Schedule of Rates, the following shall prevail to the extent of such irreconcilable conflict in order of precedence:
 - i) Contract Agreement
 - ii) Detailed Letter of Acceptance along with Statement of Agreed Variations.
 - iii) Fax / Letter of Intent / Fax of Acceptance.
 - iv) Schedule of Rates as enclosures to Detailed Letter of Acceptance.
 - v) Scope of Work.
 - vi) Special Conditions of Contract.
 - vii) Instruction to Bidders
 - viii) General Conditions of Contract.
 - ix) Indian Standards
 - x) Other applicable Standards
 - xi) A variation or amendment issued after the execution of the formal contract shall take precedence over respective clauses of the formal contract and its Annexures.

- h) It will be the contractor's responsibility to bring to the notice of Engineer-in-Charge any irreconcilable conflict in the contract documents before starting the work (s) with reference to which the conflict exists.
- i) Scope of work shall be read in conjunction with item description of Schedule of Rates.

2.0 ACCOMODATION & OTHER FACILTIES

All Boarding, lodging, transportation, Resident/Site/camp office, office infrastructure, required by the contractor for execution of the job shall be to contractor's account.

3.0 TIME SCHEDULE

Start date of contract shall be from the date of Issue of Work Order.

The CONSTRUCTION MANAGER shall put its best effort to ensure that the project shall be completed within the stipulated time frame. The contractor would prepare detailed activity schedule for the project in consultation with the Owner at the beginning/during kick-off meeting. All efforts should be made to meet all the intermediate schedule and milestones.

The contract may be short-closed upon completion of the project/ work. Due payment as per actual quantity consumed will be paid till end date of contract.

4.0 LIQUIDATED DAMAGES(LD) / PRICE REDUCTION SCHEDULE

Clause No. 30.0 (d) of the GCC stands deleted and replaced with the following:

"LD will be calculated on the basis of Total Executed Contract value (excluding amount for SOR deviation/ extra work, if any) excluding duties and taxes, where such duties/taxes have been shown separately in the contract. However, the applicable GST on the LD shall have to be borne by the CONTRACTOR. Accordingly, the liquidated damages shall be recovered from the CONTRACTOR along with applicable GST."

5.0 INSURANCES

Insurance mentioned under GCC Clause No. 14 (i) to (vii) are not mandatory under this contract. However, contractor may provide insurances under these schemes or any other scheme as per his insurance coverage preference.

Employee Compensation Insurance Policy/ Group Personal Accident Insurance Policy with sum insured 10 times of Annual Income/ or maximum allowed level shall be mandatorily provided covering all personnel engaged by the CONTRUCTION MANAGER for the period of contract validity. In case of contract extension, validity will be suitably extended. Documentary proof of all insurances shall be submitted to client before start of work.

No additional amount will be reimbursed to contractor against insurances.

6.0 HEALTH & SAFETY

Construction Manager shall ensure that all its personnel wears required PPEs when working inside Industrial area. All costs involved for PPEs are in contractor's scope.

Initial Medical Examination report shall be submitted to client before start of the contract. Periodic Medical Examination (PME) will be done every subsequent year. All costs involved for IME/ PME are in contractor's scope.

In case of accident or physical injury to any contractor's personnel, all responsibilities for medical treatment, financial compensation etc. will be in contractor's scope. In case, OIL

arranges for medical treatment etc. in case of urgency, cost of the same shall be deducted from contractor.

7.0 **DEFECT LIABILITY PERIOD**

The Defect liability period for the works under the contract is 3 months from the date of completion of contract.
