



**TRIPURA NATURAL GAS COMPANY LIMITED**

(A JOINT VENTURE OF GAIL Govt. of Tripura and Govt. of Assam)

**BID DOCUMENT FOR**

**RENOVATION WORKS FOR SIGNAGE WORKS IN CNG STATION AT  
KHAYERPUR, UDAIPUR, A.D NAGAR**

**UNDER LIMITED DOMESTIC BIDDING**

**Bid Document No.:** TNGCL/C&P/Operations /Canopy Repair/WC(105)/2020-21

**VOLUME – II OF II**

## **CONTENTS**

<b>Part – I</b>	:	Scope of Work
<b>Part – II</b>	:	Special Conditions of Contract (SCC)
<b>Part – III</b>	:	SOR

**PART – I**

**SCOPE OF WORK**

**CONTENTS**

- 00.0 INTRODUCTION.**
- 01.0 SCOPE OF WORK (FACILITY WISE).**
- 02.0 DETAILED SCOPE OF WORK.**
- 03.0 COMPLETION TIME SCHEDULE.**
- 04.0 GENERAL INSTRUCTIONS TO THE CONTRACTOR.**
- 05.0 REFERENCE SPECIFICATION, CODES AND STANDARDS**
- 06.0 APPROVALS.**
- 07.0 STRUCTURES, SERVICES AND OTHER PROPERTY.**
- 08.0 SAFETY.**
- 09.0 PROGRESS OF WORK.**

## **00.00 INTRODUCTION**

Tripura Natural Gas Company Limited (TNGCL) is a joint venture company of M/s GAIL (India) Limited Govt. of Tripura and Govt. of Assam TNGCL has been set up to supply natural gas to domestic, commercial and industrial sectors including setting up of CNG filling stations to cater to the automobile sector for vehicle in Tripura.

### **00.01 TNGCL' S VISION:**

To provide compressed natural gas (an eco-friendly fuel) & related services in Automobile, Domestic, Commercial and Industrial sectors in the state of Tripura.

### **00.02 TNGCL' S MISSION:**

To set-up at present infrastructure & services for Automobile Sector and provide compressed natural gas (an eco-friendly fuel) in the city of Agartala, Tripura.

## **00.03 GENERAL INFORMATION**

This tender deals with the Signage works involved in station at KHAYERPUR, UDAIPUR & A.D NAGAR in the state of Tripura. The list of facilities in this station along with the brief scope of work is presented in Table-I. **Further, this station shall be handed over to the contractor within a time period of 03 days from the date of FOI. However, the contractor shall have to complete the design work in all respect and get approval from client/consultant within 15 days from the date of issue of FOI by Client.**

### **01.0 SCOPE OF WORK.**

01.01 The broad scope of work under "Signage Works" is essentially but not limited to the following.

- i) Design and Construction of Monolith Tower (or Pylon).
- ii) Design and Construction of Canopy Fascia (For both Bus and Auto dispensers Canopies)
- iii) Design and Construction of Building Fascia
- iv) Design and Construction of Spreader
- v) Design and Construction of Mandatory Sign
- vi) Design and Construction of Direction Sign
- vii) Design and Construction of Canopy Column Cladding
- viii) Design and Construction of Building Cladding
- ix) Design and Fixing of Hoarding on steel sheet of existing Hoarding structure

- x) Providing and fixing spot halogen lights with iron brackets at an interval of 2 m centre to centre on top of existing hoarding and cabling up to electrical panel room of Utility building complete in all respect.

01.02 Major activities under scope of work:

Submission of Designs (including structural and foundation design) with Art work of respective signages as applicable and getting approval from TNGCL.

Supply and installation of all Signage, fixing wrinkle free sign face with lettering, Logo etc. for different Facilities including supply and fixing of necessary Lighting fixtures and cables etc. for illuminating the Signage facia as per approved design.

01.03 Description of Facilities and estimated quantities

List of facilities along with brief specification is evolved and estimated quantities are given in Table-I as well as in the respective signage items of Schedule of Rates. The tenderer has to quote on Facilities wise per unit rate as mentioned.

**Generally the following shall constitute the Contractor's scope of work but not limited to as given herein in Table-I. :**

TABLE-I

Facilities	Overall Dimension and location	Description i.e. Design and Construction and Specification	Quantity	Mode of Measurement
PYLON (Monolith Tower)	2 m X 6.5 m (from top of granite cladded footing), located midway between ingress and egress.	4mm thick ACM (Aluminium Composite Material) panel router cut cladding on M.S. framework (hollow steel sections as per design requirement) with Product Panels of Retro Reflective Sheeting Type XI DG3 Microprismetice as per ASTM D4956-09 in required colour & Size on both sides. Retro Reflective shall be of appropriate approved colour and cut-outs for product names, logos, etc. duly CNC Plotted. The body of the monolith shall be in ACM having Total Thickness of 4mm : Top Coil 0.5mm ( 3003/3105 Grade as per IS - 737 1986 with minimum 25 microns PVdF Coating on top coil and Polyester / Epoxy coating on Back Coil ( 4 -7 microns PVDF ACM in colour and shape as per approved design. The company logo should be prepared in polycarbonate sheets (GE/ LEXAN make) in	1	Lot

		<p>corporate colours and thermoformed to form the design which shall be in turn fixed in cut-outs made in monolith body of ACM. The portions of the monolith to be backlit to make the acrylic/ polycarbonate portions/ logos visible at night. Special spot lights (2 nos.- 400 watts with metal halide lights of Philips make) to be incorporated in design to light up the entire tower with throw from base. The backlit portion of the monolith to be lit with sufficient numbers T5 (28 W) tube lights (Philips make) with electronic choke, mounted on MS tube frames with plastic holders. Multi-strand copper conductors with PVC insulation to be used. Steel structural frame to be installed on RCC foundations. Top and exposed sides of the foundation to be cladded in 18 mm thick black polished granite. All work to be done in line, level and plumb, all complete with by works, as approved.</p>		
CANOPY FASCIA: (For both Bus and Auto dispensers)	1000 mm wide (in corporate colours and with surface differences in elevation)	<p>4mm thick ACM (of approved make) cladding in a combination of corporate colours with the use of Retro Reflective Sheeting Type XI DG3 Microprismetice duly pasted on ACM in required size &amp; shape (colour scheme and design to be approved) on mild steel framework with part backlit for company logo and name. The letters shall be in 30 mm thick Acrylic/ PC duly CNC Routed in require shape &amp; Size as per direction of concerned engineer. Structural frame to be welded rigidly/ Bolted to the structural member of existing canopy structures. Canopy fascia to be made in 12 m. (min.) long straight panels factory plan/processed at converters factory and assembled/installed at site. Corner piece (1 metre both sides) on both sides (as required), also to be factory plan/processed/assembled and installed at site. Only bottom trim and top flashing is to be Plan/processed and installed at site. All work to be done in line, level and plumb.</p> <p>M.S. frame shall be made minimum size of 50 x 30 x 2.5mm (RHS) rectangular steel hollow section (2.92 kg/m) for main horizontal support and vertical M.S. section shall be minimum size of 40 x 25 x 2.5mm (RHS) rectangular steel hollow section (2.23 kg/m) at c/c 500mm.</p> <p>Backlit section of the fascia shall be of 4 meters</p>	105	Rm

		length and one/ two logos (depending on design) and shall have sufficient number of LED/T5 (28 W) tube light with electronic chokes mounted with plastic holders to structural frame. The top of the fascia shall have 4 mm thick ACM with hinged GI service door in backlit part. The back of the fascia to have 18 gauge GI sheets. Multi-strand copper conductors with PVC insulation to be used. The bottom and top of the fascia shall have a white ACM trim to cover the gap between the canopy and fascia. The backside will be non-lit the contractor should make suitable fixing arrangement, which should be duly vetted by a certified structural engineer as per the actual dimensions of the canopy structure. The canopy fascia shall have a combination of approximately 200 wide ACM on the top and 700 wide below in proper approved design and colour scheme, complete with all by works.		
<b>BUILDING FASCIA</b>	700 mm wide.	Design and Construction: 4mm thick ACM (of approved make) cladding in a combination of corporate colours with the use of Retro Reflective Sheeting Type XI DG3 Microprismetice as per ASTM D 4956-09 duly pasted on ACM in required size & shape (colour scheme to be approved) on mild steel framework. Structural frame to be fasteners/ Nut Bolted to the building walls with dash fasteners and levelling 'arrangement. Building fascia to be made in maximum length of straight panels (with minimum no. of joints) straight panels factory plan/processed at converters factory and assembled/installed at site. Corner piece (1 metre both sides) on both sides, also to be factory plan/processed/assembled and installed at site. Only bottom trim and top flashing is to be Plan/processed and installed at site. All work to be done in line, level and plumb, all complete with by works, as approved. M.S. frame shall be made minimum size of 50 x 30 x 2.5mm (RHS) rectangular steel hollow section (2.92 kg/m) for main horizontal support and vertical M.S. section shall be minimum size of 40 x 25 x 2.5mm (RHS) rectangular steel hollow section (2.23 kg/m) at c/c 500mm.	37	RM
<b>SPREADER</b>	1200 X 450 mm & 900	4mm thick ACM (Aluminium Composite Material) cladding with the use of Retro	10	NOS.

	X 400 mm,- Elliptical or trapezoidal in shape and 100 mm away from column face.	Reflective Sheeting Type XI DG3 Microprismetice as per ASTM D 4956-09 duly pasted on ACM in required size & shape on structural framework with back-lit panels in 10 mm thick Acrylic/ PC duly CNC Routed in require shape & Size as per direction of concerned engineer. Front face of panels to have appropriate colour with cut-out for text as indicated in drawings as approved and the sides to be white. Spreader frame to be fixed securely to canopy columns with box & cap arrangement. The spreader to be made in two sections as per design with 'L' lock. The smaller section to be mounted on sliding channel with sufficient no. of LED/CFL lights and electronic chokes fixed with plastic holders. Multi-strand copper conductors with PVC insulation to be used. All work to be done in line, level and plumb, all complete with by works, as approved.		
MANDATO RY SIGN		4mm thick. ACM (Aluminum Composite Material) sheets cladded on structural framework. The material shall be reflective vinyl sheet and pasted on ACM frame by adhesive.  300 X 750 300 X 450 300 X 600		NOS. NOS. NOS.
DIRECTION SIGN		4mm thick. ACM (Aluminium Composite Material) cladding on steel framework with back-lit panels in 3 mm thick, thermoformed PET-G (Spectra Copolymer/Relstar) on both sides. Front face of PET-G panels to have acrylic of appropriate colour with cut-out for arrow sign as indicated in drawings and the sides to be white. The sign frame to be fixed securely to CC foundation as shown in drawings. The CC foundation shall have 8mm thick polished black granite tiles cladding on top and all exposed side surfaces. Sufficient no. of (at least 3) T5 (14 W) tube lights with electronic chokes fixed with plastic holders and electric connections. Multi-strand copper conductors with PVC insulation to be used. All work to be done in line, level and plumb.		NOS.
CANOPY COLUMN CLADDING		Cladding in white 4mm thick ACM (Aluminium Composite Material) on structural with suspension pin, fixed securely to existing	44	Sqm.



		canopy column by welding at site. ACM panel fixing to ensure consistent joint gaps and panel size. All grooves shall be sealed with sealant material of approved colour, all complete with by works, as approved. 250mm X 500 mm 200mm X 400mm M.S. frame shall be made minimum size of 50 x 30 x 2.5mm (RHS) rectangular steel hollow section (2.92 kg/m) for main horizontal support and vertical M.S. section shall be minimum size of 40 x 25 x 2.5mm (RHS) rectangular steel hollow section (2.23 kg/m) at c/c 500mm.		
HOARDING		2500 - 3000 mm wide Printed Flex sheet (make LG or 3M) with approved Art work (suitable for front lit) to be pasted to the steel sheet of existing Hoarding structure by adhesive.	36	Sqm.
SPOT HALOGEN LIGHTS		Supplying and fixing Spot halogen lights (150 watts of Philips make) at an interval of 2 m centre to centre on top of existing hoarding including supply with steel bracket and laying of cable upto electrical panel of Electrical room (in Utility building) complete in all respect.	06	NOS.

## 02.0 DETAILED SCOPE OF WORK:

- 02.01 Taking over the site from TNGCL carrying out pre-construction survey, making arrangement of safety, security, traffic detour etc. setting out the tubing GAD by laying out the plans at site.
- 02.02 Taking all measures to provide safety to traffic, public, workmen operating staff, equipment, and operation / maintenance activities, underground / above ground services and any other activity to keep the station functional at all time.
- 02.03 To carry out all tests at worksite and provide all test certificates from manufacturers / supplier and offer inspection at all stages of procurement / construction.
- 02.04 Fixing the steel structure in line and plumb with RCC footing as per design. All complete to the satisfaction of the EIC. The work includes:
- Earthwork in excavation and backfill,
  - Providing PCC 1:3:6 levelling pad.

- The metal structure to be placed on PCC pad by temporary supports and casting of RCC foundation 1:1½:3.
  - The concrete work to be cured properly as per relevant IS code before removal of temporary supports. The above work includes plastering reinforcement, inserts and shuttering work as required.
  - Alternatively RCC foundation (1:1½:3) to be constructed and cured with provision for erection of metal structures subsequently. All work to be done as per design.
- 02.05 Supply, fabrication and erection of steel structure of Monolith Tower as per design requirement.
- 02.06 Supply, fabricating and fixing steel frame of hollow steel sections as per design requirement (min. 40 x 40 x 2 mm thick hollow sections) on all sides of Pylon / canopy fascia structures. Structural frame to be welded rigidly to the structural member of existing canopy structures.
- 02.07 Any cutting of ACM panel/sheet must be done on a computerized plotter meant for this purpose. The sheet must be stuck after clearing the surface properly and care must be taken that no air pockets are left below the sheet. The sheet must be stuck evenly and completely. There should be no gaps left between the two sheets.
- 02.08 To execute any other work not specified but is found necessary for installation of the signage work.
- 02.09 To maintain and observe all statutory requirements with regards to labour laws, taxation laws, local statutory rules and insurance requirements.
- 02.10 To hand over clear site to TNGCL after removing all debris subsequent to completed works as per scope.
- 02.11 To submit daily, weekly and monthly progress reports and to attend review meetings both at site and at project office and other discussions with TNGCL / Statutory Authorities.
- 02.12 To transfer all Test Certificates, warranties / guarantees including maintenance / performance guarantees of various materials and indemnify TNGCL of any liabilities of payments / dues to its suppliers, manufacturers, agents etc.
- 02.13 To mark all as-built details during construction / installation and to submit as-built details and drawings to TNGCL in three sets.

### **03.0 Completion Time Schedule**

**The completion time schedule for this works contract is 3 months from the date of FOI or from the date of handing over of site whichever is later. However, the Signage design / art work design along with related structural /civil / electrical designs shall have to be**

**completed (i.e. got to be approved by the client/consultant) progressively within fifteen days from the date of FOI.**

04.0 General Instructions to the Contractor

04.01 Contractor shall submit Various Designs including Art work to be adopted by him to TNGCL before the construction as required in the respective specifications in due time (within 2 weeks) for approval. The Contractor shall proceed to procure, construct / erect the signage works only on specific approval by TNGCL

04.02 Contractor shall submit an exhibit of Art work along with samples of all the material to be used for signage works within a week of award of work. The Contractor shall proceed to construct / erect the signage works only on specific approval by TNGCL

04.03 Plan and prepare a schedule for execution and work implementation as per QA/QC plans to be approved by TNGCL. Set out at site by carrying out a pre-construction survey; establishing the site deviations, requirement of site modifications in construction drawings, earth filling/ cutting requirement etc.

04.04 In case any discrepancy is found between drawings & documents, the same shall be brought to the notice of the Engineer-in-charge before execution of work and decision of the Engineer-in-charge shall be final and binding to the contractor without any extra cost implication to TNGCL.

04.05 The contractor has to make all shop drawings wherever necessary, at his own cost, and get it approved by TNGCL before commencement of that work at site.

04.06 Specification and descriptions of various items are for identification of material and works to be carried out under them. No cost shall be quoted against these unless mentioned.

04.07 Quantities as mentioned are indicative and can have a variation from the quantities actually executed. The contractor is advised to work out the breakup of individual work items and quantities at his own before quoting any rates. TNGCL is not liable for any discrepancies in the quantities and no extra time or cost shall be granted on this pretext.

04.08 The contractor has to obtain all types of statutory approvals including `C' form, `D' form, completion certificate, approval from electrical inspector for electrical work and DG set, electrical connection, water connection, fire department etc. and all other approvals that might be required to commission the station, from various relevant authorities during the course of work and after completion of works in co-ordination with TNGCL without any cost implication to TNGCL.

04.09 The contractor has to arrange all tools and plants, lighting arrangements, store, electricity and water at his own cost.

- 04.10 The contractor should quote keeping this in mind that no request for escalation in the cost shall be entertained under any circumstances by Owner after placement of order.
- 04.11 The tender contain tender purpose drawings. These information / details are for “Tender Purpose only”. The tenderer should visit each location and acquaint him with site conditions of each site. No deviations and/or claims whatsoever of any kind and nature would be admissible.
- 04.12 The work shall be carried out in city conditions and generally close to the roads and public services conveying a considerable volume of vehicular traffic and human activity. It is deemed necessary that the tenderer considers the “SAFETY” as the MOST IMPORTANT aspect of working conditions and is required to include in his offer all costs (direct and indirect) towards observance, compliance and provision of all safety appurtenances and norms.
- 04.13 Installing site markers, warning signs, etc. and cleaning all unserviceable materials, debris to designated disposal areas and obtain a No Dues Certificate from the concerned authorities.
- 04.14 Handing over the completed works to TNGCL for their operation / use purposes.
- 04.15 The Contractor has to prepare As-Built drawings, shop drawings, fabrication drawings and submit them along with test certificates, guarantee cards/ warranty cards/ service schedule any other purchase documents/ literature for all equipment / fixtures / fittings installed at the time of completion of work.
- 04.16 Any other activity(ies) not mentioned/ covered explicitly above, but otherwise required for satisfactory completion/ operation/ safety/ statutory/ maintenance of the works shall also be covered under the Scope of Work and has to be completed by the Contractor within specified Schedule of Items of Works at no extra cost to TNGCL.

#### **05.0 REFERENCE SPECIFICATION, CODES AND STANDARDS**

The contractor shall carry out the work in accordance with this Specification, approved construction drawings, TNGCL’s Engineering Standards or relevant BIS code as might be required.

Should the Contractor find any discrepancy, ambiguity or conflict in or between any of the Standards and the contract documents, then this should be promptly referred to the Engineer-in-charge (EIC) for his decision, which shall be considered binding on the contractor.

#### **06.0 APPROVALS**

Approval for all work should be obtained from EIC prior to execution. To ensure smooth execution of the work on a day-to-day basis it will be the Contractors responsibility to liaison with EIC / concerned engineer and obtain necessary approvals.

#### **07.0 STRUCTURES, SERVICES AND OTHER PROPERTY**

#### 07.01 Protection of Structures and Utilities

The Contractor shall at his own cost, support and protect all buildings, walls, fences or other structures and all utilities and property which may, unless so protected, be damaged as a result of the unsafe execution of the works. He shall also comply with the requirements in the specification relating to protective measures applicable to particular operations or kind of work.

#### 07.02 Interference with Traffic, Street Drainage and General Public

The Work shall be executed in such a manner as to cause a minimum of inconvenience to persons requiring to use public or private roads, lanes, thoroughfares, walkways, rights of use or passages through which the works are to be executed. Closure of roads, etc., shall not be permitted without the approval of the EIC.

The contractor shall conduct his operations at all times, with a view to minimizing, as far as possible, noise from construction and other objectionable nuisances.

#### 08.0 **SAFETY**

The Contractor shall conform to the requirements outlined in Preamble for safety requirements. In addition, the Contractor shall observe safe working practices in the storage and handling of pipes, SS tubes, flammable fluids, etc. and ensure that smoking or naked flames are not permitted in the vicinity when these works are being executed.

The Contractor shall also protect all work sites with warning signs, barricades and night lighting.

The contractor should ensure that the workers wear safety shoes and helmets while carrying out any work under the present scope.

Where the EIC determines that the Contractor is performing the work in an unsafe manner, he may suspend the work until the Contractor takes corrective action.

Since the work shall be carried out in city conditions and generally close to the highways/roads and public services conveying a considerable volume of vehicular traffic and human activity, it is deemed necessary that the tenderer considers the "SAFETY" as the MOST IMPORTANT aspect of working conditions and is required to include in his offer all costs (direct and indirect) towards observance, compliance and provision of all safety appurtenances and norms.

#### 09.0 **PROGRESS OF WORK**

The Contractor shall proceed with the Work under the Contract with due expedition and without delay.

The EIC may direct in what order and at what time the various stages or parts of the work under the Contract shall be performed.

If the Contractor can reasonably comply with this direction, the Contractor shall do so. If the Contractor cannot reasonably comply, the Contractor shall notify the EIC in writing giving reasons.

**LIST OF APPROVED MAKES:**

<b><u>Sl. No.</u></b>	<b><u>Item</u></b>	<b><u>Make</u></b>
1.	Structural steel.	TATA, SAIL or Jindal
2.	Reinforcement steel	TATA, SAIL, Jindal, Thermex
3.	GI sheet.	TATA or SAIL
4.	Cement	ACC, L&T, Star, Dalmia, Crown
5.	ACM panel	Alcopanel: Green(121), Traffic Yellow(113), Red(603),- 4mm thk. or Alucobond Eco:Emerald green(691), Lemon(8200), Red(8201) - 4 mm thk. or Alucomat: Signal Green (AR 3520B), Lemon yellow (AR3569B), Traffic Red (AR3567A) -4 mm thk. Or Alstrong: Traffic Green(AL-31), Bright Yellow (AL-35), Bright Red (AL-08)
6.	PET-G panels	Spectra copolymer or Relstar- 3 mm thk
7.	Polycarbonate sheet	Lexan Polycarbonate Multiwall Sheet. by GE Plastic India- 2 mm thk.
8.	Flexible substrate (Flex sheet)	“LG Lucky Flex” by LG Plastika Pvt. Ltd. Or “3M Panagraphics-II” by Birla 3M -1.2 mm thk
9.	Retro-reflective Vinyl:	LG Luckylite HR or, 3M Scotchlite Diamond grade VIP micro-prismatic series 3990, to match TNGCL colors.
10.	Tube light	Phillips ‘Trulite’ with electronic choke & Starters and Condensor (make Seimens / Epcos) mounted on MS tube frames with plastic holder
11.	Halogen Spot Light	Phillips
12.	Paint	Asian Paints, ICI or Burger
13.	Silicon sealant:	Dow corning 78
14.	Electrical conductors:	Skytone or CCI or Universal or Grandley or Flex or Plaza

## **PART – II**

# **SPECIAL CONDITIONS OF CONTRACTS**



## **GENERAL**

- 1.1 Special Conditions of Contract shall be read in Conjunction with the General Conations of Contract, specification of work, Drawings and any other documents forming part of this contract wherever so requires.
- 1.2 Notwithstanding the sub-division of the documents into these separate sections and volumes, even part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into contract so far as it may practicable to do so.
- 1.3 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provision 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 the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.
- 1.4 Wherever it is mentioned in the specifications that the CONTRACTOR shall perform certain work or provide certain facilities, it is understood that the CONTRACTOR shall do so at this cost and the **value of contract** shall be deemed to have included cost of such performance and provision, so mentioned.
- 1.5 The material, design and workmanship shall satisfy the relevant INDIAN STANDARDS, the JOB SPECIFICATION contained herein and CODES referred to. Where the job specification stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.
- 1.6 In case of an irreconcilable conflict between Indian or other applicable standards General Conditions of Contract, special Conditions of Contract, Specifications, Drawings or Schedule of Rates, the following shall prevail to the extent of such irreconcilable conflict in order of precedence:
  - i) Letter of acceptance / FOI along with statement of agreed variations.
  - ii) Schedule of Rates as enclosures to letter of Acceptance.
  - iii) Job Specification and Approved Construction Drawings
  - iv) SCC (Special Conditions of Contract)
  - v) ITB (Instruction to Bidders)
  - vi) GCC (General conditions of Contract)
  - vii) Indian standards
  - viii) Other applicable standards

- 1.7 The work is to be carried out in the location as specified in the “Scope of Work”.
- 1.8 The Tenderer shall familiarise himself with the site condition before submission of tender. Failure to do so shall not absolve him of his responsibility about proper execution of contract work. No claims for extra payment due to any special site conditions shall be considered after acceptance of order.
- 1.9 The Tenderer shall satisfy TNGCL that he possesses the necessary technical experience and has adequate facilities and manpower to ensure that contract work shall be of best quality and workmanship.
- 1.10 The Tenderer shall submit along with his tender a bar chart showing his program of executing the contract work.
- 1.11 The Contractor shall carry out his work as per the technical specifications / work description given in schedule of rates and obtain necessary clarifications / instructions from TNGCL, if necessary.
- 1.12 TNGCL reserves the right of entry to the site at any time during the execution of the work, with or without prior intimation to the Contractor.
- 1.13 During the execution of the work at site, the instructions given by TNGCL shall be final and binding on the Contractor and shall be observed in full with respect to spirit of technical specification, drawing, methods of conducting work and priorities of various part of work.
- 1.14 The work shall be inspected and passed by TNGCL from time to time at site. The Contractor shall provide all facilities for such inspection free of cost. Notwithstanding any inspection of the work, TNGCL shall have the right to reject any work not conforming to the technical specification without being liable for any explanations or compensations.
- 1.15 During the execution of the work, if any problem arises which is not covered by the technical specifications, the Contractor shall seek necessary clarifications and instructions from TNGCL. Such instructions shall be binding on the Contractor and shall be observed in full.
- 1.16 The Contractor shall strictly follow statutory requirements/ obligations including government bylaws and also the instructions conveyed by EIC from time to time.
- 1.17 The Contractor shall mobilise adequate number of qualified and experience personnel and arrange at his cost, all necessary instruments, materials, consumables, tools and tackles, power, etc. required for undertaking the work.
- 1.18 The Contractor shall have no claim whatsoever against Owner for reduction in the scope of work either in part or full at any stage of work. In case quantities under a particular item are increased, the same shall be executed at the contract rates.

1.19 Contractor shall provide to TNGCL a comprehensive performance Guarantee Certificate for a minimum period of one year from the date of handing over. Any defect in material / workmanship arising in his work (except consumables like tube lights) during this period shall be fully rectified and replaced at his own cost.

1.20 In the absence of any specification covering any material, design of work(s) the same shall be performed/ supplied/ executed in accordance standards Engineering practice as per the instructions/directions of the Engineer-in-charge which will be binding on the Contractor.

## 2.0 **SITE LOCATION**

TRTC, Krishnanagar CNG Mother Station.

## 3.0 **SCOPE OF WORK**

Design, Engineering, Approval of drawings, Supply, Fabrication and installation of Signage Works in TRTC, Krishnanagar CNG Mother Station at Agartala as described in the SCOPE OF WORK, Vol-II of II.

## 4.0 **WORKS CONTRACT**

The entire work as per scope of work covered under this contract shall be treated as "Works Contract".

## 5.0 **Approval of Design and Drawings**

5.1 Contractor shall submit Various Designs including Art work to be adopted by him to TNGCL before the construction as required in the respective specifications in due time (within 2 weeks) for Approval. The Contractor shall proceed to Procure, construct / erect the signage works only on specific approval by TNGCL

5.2 Contractor shall submit an exhibit of Art work along with samples of all the material to be used for signage works within a week of award of work. The Contractor shall proceed to construct / erect the signage works only on specific approval by TNGCL.

## 6.0 **TIME OF COMPLETION & PROGRESS REPORT**

6.1 The work shall be executed strictly as per time schedule given at clause 03.00 of Part – I of Vol-II of II. The period of completion given includes the time required for mobilization as well as rectifications, if any, and completion in all respects to the entire satisfaction of the Engineer-in-charge.

6.2 A Joint programme of execution of work be prepared by the Engineer-in-charge and Contractor. This programme will take into account the time of completion mentioned above. The contracts shall scrupulously adhere to these targets/ programme by deploying adequate personnel, construction tools & tackles and he shall also supply all materials of his

scope of supply in good time to achieve the targets set out in the weekly and monthly programme. In all matters concerning the extent of targets set out in the weekly / monthly programme and achievements, the decision of the Engineer-in-charge shall be final and binding on the Contractor.

6.3 Besides above CONTRACTOR shall submit the following:

- i) Once a week, CONTRACTOR shall submit a summary of the work accomplished during the preceding week in form of percentage completion of the various phase of the work, to the OWNER.
- ii) Weekly Progress reports shall be supplied by CONTRACTOR with documents such as chart, networks, photographs, test certificates etc. Such progress reports shall be in the form and size as may be required by the OWNER and shall be submitted in at least 3(three) copies.

#### 7.0 **RECRUITMENT OF PERSONNEL BY CONTRACTOR**

The Contractor shall not recruit personnel of any category from among those who are already employed by the other agencies working at the sites but shall make maximum use of local labour available.

#### 8.0 **CONSTRUCTION WATER AND POWER SUPPLY**

8.1 No water and power will be provided by the owner. The Contractor shall arrange his own electrical power for illumination and testing of Signage works.

#### 9.0 **LAND FOR RESIDENTIAL ACCOMMODATION**

Owner shall not provide any land for residential accommodation of Contractors staff and labour.

#### 10.0 **MEASUREMENT OF WORKS**

10.1 Payment will be made on the basis of joint measurements, taken by Contractor and certified by Engineer-in-charge. Measurement shall be based on "Approved for Construction" drawings, to the extent that the work conforms to the drawings and details are adequate.

10.2 Wherever works is executed based on instruction of Engineer-in-charge, or details are not available or inadequate, physical measurements will be taken by the CONTRACTOR in the presence of the Representative of the Engineer-in-charge.

10.3 Indian Standard Methods of Measurement (IS 1200), as last amended, shall be referred for measurement purposes, wherever, applicable.

10.4 Measurement of weights shall be in Metric Tonnes, correct to the nearest kilogram. Measurement of lengths shall be in Meters, correct to the nearest centimetre.

10.5 Bolts, nuts, washer and weld metal weights shall not be added on for structural work and no deduction shall be made for holes drilled. Weights shall be assessed from fabrication drawings/ bills of material prepared by Contractor and reviewed/ approved by Engineer-in-charge, on the basis of IS/ manufacturers hand book. No allowance shall be made for rolling tolerance.

11.0 **INCOME TAX**

11.1 Income Tax at the prevailing rate as applicable from time to time shall be deducted from CONTRACTORS bills as per Income Tax Act and quoted Rates shall be deemed to include this.

12.0 **TAXES, DUTIES, OCTROI, LEVIES ETC.**

The quoted prices shall be deemed to be inclusive of all taxes, duties, octroi, levies work contract tax if any etc. till the completion of the contract and Contractor shall not be eligible for any compensation on this account. No statutory variation on this account will be payable by Owner.

12.1 Contractor shall be registered with Sales Tax Authority and shall furnish his Sales Tax Regn. No. In case he fails to get himself registered with State Tax Authority, Work Order may be cancelled at the option of OWNER. Till the time he is not registered with State Sales Tax Authority, no progress payment shall be released to him.

12.2 Any Indian Income Tax/Sales Tax on Works Contract which Purchaser may be required to deduct by law or statute, shall be deducted at source and the same shall be paid to Income Tax/Sales Tax Authorities on account of Contractor. Purchaser shall provide the Contractor a certificate for such deduction of tax. The Contractor shall indicate their Permanent Account no. with the relevant Income Tax Authority for this purpose to Purchaser.

12.3 Royalties for construction materials where applicable is included in the unit rates and shall be borne and paid by the Contractor to concerned government authorities of State/ Centre. Owner shall bear no liability in respect of this.

12.4 In case of any dispute about labour content of the Contract Price by the Assessing Authority while computing Sales Tax on Works Contracts, OWNER/PURCHASER will bear no liability in this respect and the Contractor shall settle the same with Assessing Authority without any claim on OWNER/PURCHASER on this account.

12.5 The Contractor shall produce documentary evidence as may be called for Purchaser in respect of taxes, duties, etc., paid by the Contractor, along with RA Bill.

13.0 **REGISTRATION UNDER SALES TAX ACT**

Attested copy of certificate for registration under State Government Sales Tax Act in the Performa prescribed by State Govt. should accompany the tender. The registration should be in the name of the Firm/Individual quoting for the work. In absence of the above registration,

tenderer may not be awarded the work tendered for, in the light of State Govt. directive / instruction.

#### 14.0 **TERMS OF PAYMENT**

Pending completion of the whole works, provisional progressive payments for the part of work executed by the Contractor shall be made by Owner on the basis of said work completed and certified by the EIC/Owner's representative as per the agreed milestone, payment schedule and the percentage break-ups given below.

Contractor shall submit his invoices in triplicate to the EIC/Owner's representative monthly in the manner as instructed by Owner. Each invoice will be supported by documentation acceptable to Owner and certified by the Owner's representative. Payments made by owner to the Contractor for any part of the work shall not deem that the Owner has accepted the work. The progress payment shall be considered only as an advance against the work done. However these payments shall be finally adjusted against full and final contract value to be made to the Contractor.

Payment will be made through account payee cheque payable at Agartala City (in Tripura) against the invoice to be submitted by Contractor on monthly basis against the work done during the preceding month on the basis of accepted unit rates as per Contract in the following manner:

- i) The payment will be released within 15 days of submission of invoice along with necessary document as per contract.
- ii) 90% of the executed work, duly certified by Engineer-in-charge on pro- rata basis, on completion of works and against submission of other requisite documents.
- iii) 10% of contract price after satisfactory completion of three months from the date of handing over to TNGCL or, issuance of Completion Certificate by Engineer-in-charge, whichever is later, and on furnishing a performance bank guarantee for the same amount in the format indicated in Vol -I.

#### 15.0 **PROVIDENT FUND ACT**

15.1 The Contractor shall strictly comply with the provisions of Employees Provident Fund Act and register themselves with RPFC before commencing work. The Contractor shall deposit Employees and Employers contributions to the RPFC every month. The Contractor shall furnish along with each running bill, the challan/receipt for the payment made to the RPFC for the preceding months.

15.2 In case the RPFC's challan/receipt, as above, is not furnished, Owner shall deduct 16 % (Sixteen percent) of the payable amount from Contractor's running bill and retain the same as a deposit. Such retaining amounts shall be refunded to Contractor on production of RPFC challan/receipt for the period covered by the related running bill.

16.0 **MOBILISATION ADVANCE (M.A.)**

There is no provision of any mobilisation advance under this works contract.

17.0 **SITE CLEANING**

17.1 The Contractor shall take care for cleaning the working site from time to time for easy access to work site and also from safety point of view.

17.2 Working site should be always kept cleaned upto the entire satisfactions of the Engineer-in-charge.

Before handing over the works to owner, the Contractor in addition to other formalities to be observed as detailed in the document shall clear the site to the entire satisfaction of Engineer-in-charge.

17.3 **Rules & Regulations**

CONTRACTOR shall observe in addition to Codes specified in respective specification, all National and Local Laws, Ordinances, Rules and Regulations and requirements pertaining to the WORK and shall be responsible for extra costs arising from violations of the same.

17.4 **Field Inspection**

The Contractor shall have at all times during the performance of the Work, a Competent Site In Charge (SIC) on the premises. Any instruction given to SIC shall be construed as having been given to the Contractor.

17.5 **Erection and Installation**

The Contractor shall carry out required supervision and inspection as per quality assurance plan and furnish all assistance required by the OWNER in carrying out inspection work during this phase. The OWNER will have engineers, inspectors or other authorised representatives present who are to have free access to the work at all times. If an owner's representative notifies the Contractor's authorised representative not lower than a Foreman of any deficiency, or recommends action regarding compliance with the specifications, the Contractor shall make every effort to carry out such instructions to complete the work conforming to the specifications and approved drawings in the fullest degree consistent with best industry practice.

18.0 **DOCUMENTATION**

18.1 **"AS BUILT" DRAWINGS**

Notwithstanding the provisions contained in standard specifications, upon completion of WORK, the CONTRACTOR shall complete all the related drawings to the "AS BUILT" stage and provide the OWNER, the following:

- a) Six sets of all drawings approved by the consultant after incorporating the changes undergone during construction.
- b) Six sets of all Civil, Structural fabrication & Electrical drawings prepared by the Contractor.
- c) All as-built drawings as mentioned in specification for documentation enclosed elsewhere in the tender.

## 18.2 **COMPLETION DOCUMENT**

The following documents shall be submitted in hard binder by the Contractor in three sets, as a part of completion documents:-

- i) Batch Test Certificate from manufacturers for ACM Panels, Steel sections (Rectangular or Tubular), Electrical fittings, Halogen/Floodlights, Cables etc.
- ii) All as-built drawings as mentioned in specification for documentation enclosed elsewhere in the tender.
- iv) Completion Certificate issued by EIC/Owner's Site Engineer.
- v) No claim certificate by the Contractor.
- vi) Statement for reconciliation of all the payments and recoveries made in the running bills.
- vii) Copies of deviation statement and order of extension of time, if granted.
- viii) Copy of statutory clearance as applicable, from competent authority w.r.t. ESIC, EPF. District / central labour authority.
- ix) Copy of sales tax assessment from competent authority.

## 19.0 **SURVEY AND LEVEL/SETTING OUT WORK**

- 19.1 Before the WORK or any part thereof are begun, the Contractor's agent and the Engineer-in-Charge's representative shall together survey and take levels of the SITE and decide all particulars on which the survey is to be made, and on which measurements of the WORK are to be based. Such particulars shall be plotted by the Contractor and after agreement the drawings shall be signed by the Engineer-in-Charge.
- 19.2 The Contractor shall be entirely responsible for the horizontal and vertical alignment, the level and correctness of every part of the WORK and shall rectify any errors or imperfections therein. Such rectifications shall be carried out by the Contractor at his own cost, when instructions are issued to this effect by the Engineer-in-Charge or his representative.
- 19.3 The Engineer-in-Charge shall furnish the relevant existing grid point with Bench Mark on the land. It shall be Contractor's responsibility to set out the necessary control points in and to set out the alignment of the various works. The CONTRACTOR shall have to employ efficient survey team for this purpose and the accuracy of such setting out work shall be Contractor's responsibility.



- 19.4 The CONTRACTOR shall give the Engineer-in-Charge not less than 24 (twenty four) hours notice in writing of his intention to set out or give levels for any part of the WORK so that arrangements may be made checking the same.
- 19.5 WORK shall be suspended for such times as necessary for checking lines and levels on any part of the WORK.
- 19.6 The CONTRACTOR shall at his own expense provide all assistance, which the Engineer-in-Charge may require for checking the setting out the WORKS.
- 19.7 Before commencement of any activity, Contractor's quality control set up duly approved by company must be available at site.

20.0 **ORDER OF WORKS/PERMISSIONS/RIGHT OF ENTRY/CARE OF EXISTING SERVICES.**

- 20.1 The order in which the WORK shall be carried out shall be subject to the approval of the Engineer-in-charge and shall be so as to suit the detailed method of construction adopted by the CONTRACTOR, as well as the agreed joint programme. The WORK shall be carried out in a manner so as to enable the other Contractors, if any, to work concurrently.

OWNER reserves right to fix up priorities which will be conveyed by Engineer-in-Charge and the CONTRACTOR shall plan and execute work accordingly.

20.2 **Existing Service**

The Contractor will familiarise himself with and obtain information and details from the Owner in respect of all existing structures, overhead lines, existing pipelines and utilities existing at the job site before commencing work.

- 20.3 Should any damage be done by the CONTRACTOR to any mains, pipes, cables or lines (whether above or below ground etc.), whether or not shown on the drawings the CONTRACTOR must make good or bear the cost of making good the same without delay to the satisfaction of the Engineer-in-Charge.

21.0 **QUALITY ASSURANCE / QUALITY CONTROL PROGRAMME**

- 21.1 Bidder shall include in his offer the Quality assurances Programme containing the overall quality management and procedures which is required to be adhered to during the execution of Contractor. After the award of the contract detailed quality assurance programme to be followed for the execution of contract under various divisions of work will be mutually discussed and agreed to.
- 21.2 The Contractor shall establish document and maintain an effective quality assurance system as outlines in recognised codes.
- 21.3 Quality Assurance system plans/procedures of the Contractor shall be furnished in the form of a QA manual. This document should cover details of the personnel responsible for the

Quality Assurance, plans or procedures to be followed for quality control in respect of Procurement, Supply, Installation, Testing and Commissioning. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of work at site as well as the manufacture's works and despatch of materials.

- 21.4 The Owner/Consultant or their representative reserve the right to inspect witness, review any or all stages of work at shop/site as deemed necessary for quality assurance.
- 21.5 The Contractor has to ensure the deployment of quality Assurance and Quality Control Engineer(s) depending upon the quantum of work. This QA/ QC group shall be fully responsible to carry out the work as per standards and all code requirements. In case Engineer-in-charge feels that Contractor's QA/QC Engineer(s) are incompetent or insufficient, Contractor has to deploy other experienced Engineer(s) as per site requirement and to the full satisfaction of Engineer-in-charge.
- 21.6 In case Contractor fails to follow the instructions of Engineer-in-charge with respect to above clauses, next payment due to him shall not be released unless until he complies with the instructions to the full satisfaction of Engineer-in-charge.

## 22.0 **DEDUCTION FROM CONTRACT PRICE**

All costs, damages or expenses which the OWNER may have paid, for which under the CONTRACT the CONTRACTOR is liable, shall be cleared by the OWNER. All such claims shall be billed by the OWNER to the CONTRACTOR, regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the CONTRACTOR to properly identify such claims. Such claims shall be paid by the CONTRACTOR within fifteen (15) days of the receipt of corresponding bills and if not paid by the CONTRACTOR within the said period, the OWNER may then deduct the amount, from any amount due or becoming due by the amount, from any amount due or becoming due by OWNER to the CONTRACTOR under the Contract may be recovered by actions of law or otherwise, if the CONTRACTOR fails to satisfy the OWNER of such claims.

## 23.0 **CONSTRUCTION AIDS, EQUIPMENT, TOOLS & TACKLES**

CONTRACTOR shall be solely responsible for making available for executing the work, all requisite Construction Equipments, Special Aids, Cranes, and Tools, Tackles and testing equipments and appliances. Such construction equipments etc. shall be subject to examination by owner and approval for the same being in first class operating condition. Any discrepancies pointed out by OWNER shall be immediately got rectified, repaired or the equipment replaced altogether, by CONTRACTOR. OWNER shall not in any way be responsible for providing any such equipment, machinery, tools and tackles.

The OWNER reserves the right to rearrange such deployment depending upon the progress and priority of work in various sections.

24.0 **MATERIALS**

All materials to be brought by the Contractor must be of good quality and the Contractor must satisfy the Engineer-in-charge with test reports of the materials procured by him at his own cost. The Contractor must carry out the tests as demanded by Engineer-in-charge and produce a test report from a reputed/ approved test lab and also attach a copy of these reports with the Running Bill, failing which, works carried out with that material will not be considered fit for billing.

25.0 **MAKE OF MATERIALS**

The materials required to be supplied by the Contractor under this contract shall be procured only from Owner approved vendors. Where the makes of materials are not indicated in the tender document Contractor shall furnish the details of makes and shall obtain prior approval of Engineer-in-charge of sub-vendors before placing order.

26.0 **TEST CERTIFICATES**

Bidders shall be required to submit recent test certificates for the material being used in works from the recognized laboratories. These certificates should indicate all properties of the materials as required in relevant IS Standards or International Standards.

27.0 **EXECUTION OF ELECTRICAL WORKS**

The Contractor shall engage an approved electrical agency for execution of electrical works, holding valid electrical Contractor licence. In case electrical works are executed by Contractor himself then valid Electrical Contractor's licence shall have to be produced by him before start of electrical works at site.

28.0 **LEADS**

For the various works, in case of contradiction, leads mentioned in the Schedule of Rates shall prevail over those indicated in the Technical Specifications.

29.0 **CONTRACT AGREEMENT**

29.1 Contract Documents for agreement shall be prepared, after award of works to the successful tenderer by FOI / detailed letter of award. Until the final Contract documents are prepared and executed this tender document together with the annexed documents, modifications, deletions agreed upon by the OWNER and Tenderer's acceptance thereof shall constitute a binding contract between the successful tenderer and the OWNER based on terms contained in the aforesaid documents and the finally submitted and accepted prices.

29.2 The Contract document shall consist of the following:-

- a) Original tender documents issued with its enclosures.
- b) Addendum/Corrigendum to tender documents issued if any.
- c) Fax of Intent.
- d) The detailed letter of Intent/Acceptance along with statement of Agreed Variation (if any) and enclosures attached there with.

29.3 The statement of agreed deviations shall be prepared based on the finally retained deviations if any by the Tenderer and all correspondences and MOM's held between the OWNER and the Tenderer prior to issue of letter / fax of intent shall be treated as Null and Void. Any deviation or stipulations made and accepted by the owner after award of the jobs shall be treated as amendments to the contract documents as above.

30.0 **ADDITIONAL WORKS/EXTRA WORKS**

OWNER reserves their right to execute any additional works/extra works, during the execution of work, either by themselves or by appointing any other agency even though such works are incidental to and necessary for the completion of works awarded to the Contractor. In the event of such decisions taken by OWNER, Contractor is required to extend necessary cooperation, and act as per the instructions of Engineer-in-Charge.

31.0 **INSPECTION OF SUPPLY ITEMS**

All inspections and tests shall be made as required by the specifications forming part of this contract. Contractor shall advise Owner/Consultant in writing at least 10 days in advance of the date of final inspection/tests. Manufactures inspection or testing certificates for equipment and materials supplied, may be considered for acceptance at the discretion of Owner/ Consultant. All costs towards testing etc. shall be borne by the Contractor within their quoted rates. All inspection of various items shall be carried out based on Quality Assurance Plan, which will be submitted by the Contractor and duly approved by Owner/ Consultant.

32.0 **ESCALATION**

The Unit Rates quoted shall remain firm till contractual completion period and no price Escalation shall be entertained.

33.0 **PRELIMINARY EXAMINATION :**

33.1 The OWNER will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

33.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the

unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the errors, its Bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.

33.3 Prior to the detailed evaluation, the OWNER will determine the substantial responsiveness of each Bid with reference to the Bidding Documents. For this purpose a substantially responsive Bid is one which confirms to all other terms and Conditions of the Bidding documents without material deviations. The OWNER'S determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

33.4 The OWNER may waive any minor informality or non-conformity or irregularity in a Bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

34.0 **MANPOWER**

The bidder should provide adequate qualified and experienced manpower for ensuring required quality control and timely completion of Project.

35.0 **COMPUTERISED CONTRACTORS BILLING SYSTEM**

Without prejudice to stipulation in General Condition of Contract, Contractor should follow following billing system.

The bills will be prepared by the Contractor on their own PCs as per the standard formats and codification scheme proposed by TNGCL. The Contractor will be provided with data entry software to capture the relevant billing data for subsequent processing. Contractor will submit these data to TNGCL in an electronic media alongwith the hard copy of the bill, necessary enclosures and documents. The Contractor will also ensure the correctness and consistency of data so entered with the hard copy of the bill submitted for payment.

Owner will utilize these data for processing and verification of the Contractor's of Bills".

36.0 **DOCUMENTS TO BE SUBMITTED/ PRODUCED ALONGWITH R.A. BILLS**

- i) Computerized R.A. Bill/ Manual Bill, with IT No. /ST No. /Labour Licence No. printed thereon.
- ii) ESI/ EPF clearance certificates for the last month along with R.A. Bills.
- iii) Insurance Policy as per relevant clauses of Contract Agreement.
- iv) Attendance Register and Salary Records.
- v) Photocopy of the measurement book to be attached with R.A. Bills.

- vi) Any other document required for the purpose of processing the bills.
- vii) Registration Certificate with Sales tax authorities of state concerned.