Engineering & Projects SBU-LI



# बामर लॉरी एण्ड कं. लिमिटेड Balmer Lawrie & Co.Ltd.

(A Government of India Enterprise)
Engineering & Projects
21, Netaji Subhas Road
Kolkata - 700 001

Supply, Installation, Testing & Commissioning of Automatic Fire Sprinkler System for Central Warehouse

at

**AMTZ, ANDHRA PRADESH** 

Tender No. EP / AMTZ / CWH / FSS / 12

Tender Date: 10.08.2020

Due Date: 31.08.2020, 16:00 Hrs

**UNPRICED PART (PART-I)** 

# **TENDERER'S CHECKLIST POINTS**

Tenderer shall require filling in the table below appropriately:

SI No.	Submission of Document	Bidder's Confirmation/Submission (Yes / No)
1	Earnest Money Deposit	
2	90 days validity of the offer confirmation	
3	Audited Annual Reports (for past three years)	
4	Copy of Work Order and Completion Certificates	
	for similar job as per Pre-qualification Criteria	
5	Power of Attorney of the Signatory	
6	PAN	
7	Provident Fund Registration	
8	GSTIN Registration	
9	ESI Registration	
10	Valid MSE or NSIC certificate as per tender if	
	applicable	
11	Compliance of Company's HSE policy	
12	Price Schedule in Un-priced Bid duly blanked out	
	and signed	
13	<b>Tender Document</b> (along with addendum if any)	
	duly signed and stamped on all pages	
14	<b>Price quoted</b> strictly as per Tender price schedule	
15	Payment Terms in compliance to tender requirement	
16	<b>Completion Period</b> in compliance to tender requirement	
17	LD clause in compliance to tender requirement	
18	Warranties and Guarantee in compliance to	
	tender requirement	
19	All others Technical & Commercial Terms &	
	Conditions shall remain unaltered as per Tender document	

Hard copies of the above confirmatory documents must be sent before due date of submission of online tenders

# **Bidder's Information**

SI no.	Description	Details to be filled up by Bidder
1	Name1 (max. 35 char.)	
2	Name2 (max. 40 char.)	
3	Street/House No. (max. 50 char.)	
4	Street1 (max. 40 char.)	
5	Street2 (max. 40 char.)	
6	PIN Code (Postal Index No. e.g. "700001")	
"	(max. 6 char.)	
7	City/Place (e.g. "Kolkata" or "Dehradun")	
'	(max. 40 char.) or as the name of the city	
8	Country ("India" or "England" or as the name	
	of country be)	
9	State (Name the state from where the office	
	of Bidder operates)	
10	First Tel. No. (With STD Code): (e.g. 033-	
10	22225280 or 022-66552814) (max. 30 char.)	
11	First Fax No. (with STD Code)	
12	Contact Person	
13	First Mobile No.	
14	E-mail Address) (max. 40 char.)	
15	PAN No.:	
16	GSTIN Registration No. :	
17	GSP Name (GST Suvidha Provider)	
18	Bank Name (max. 60 char.)	
19	Street (max. 35 char.)	
20	City (max. 35 char.)	
21	Branch (max. 40 char.)	
22	IFSC Code	
23	MICR Code	
24	Account No.	
25	Type of Account (Current, Savings, etc.)	

**Engineering & Projects** SBU-LI

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# **PRICED PART (PART II)**

1. **SCHEDULE OF WORK** 

# NOTICE INVITING TENDER Tender No. EP / AMTZ / CWH / FSS/ 12

1.0 Balmer Lawrie & Co. Ltd. invite <u>ONLINE BIDS</u> from experienced, competent and resourceful Contractors with sound technical and financial capabilities for Supply, Installation, Testing & Commissioning of Automatic Fire Sprinkler System in existing Central Warehouse at AMTZ, Visakhapatnam, Andhra Pradesh.

## 2.0 **SCOPE OF WORK**

The tender under reference covers supply, installation, testing, commissioning of Automatic Fire Sprinkler System in existing Warehouse as per the notice inviting tender, condition of contract, technical specification, tender drawing & schedule of work and as per the direction & satisfaction of the Engineer-in-Charge.

# 3.0 **COMPLETION PERIOD**

Time is the essence of the contract. The time schedule for total work according to the contract shall be **Three (3) months** from the date of placement of order or handing over of site whichever is later.

# 4.0 **EARNEST MONEY DEPOSIT**

Unpriced Part of the Bid should be accompanied by a Demand Draft or Bank Guarantee of **Rs 18,000.00** (**Rupees Eighteen Thousand Only**) towards Earnest Money Deposit (EMD) executed by any scheduled bank drawn in favour of M/s Balmer Lawrie & Co. Ltd. payable at Kolkata as per format enclosed. EMD submitted by way of Bank Guarantee should be valid for a minimum period of 120 days after the due date of tender submission.

Earnest Money deposit (EMD) is exempted for agencies registered under NSIC or coming under the definition of Micro and Small Industries and holding valid registration certificates covering the tendered items/services. Declaration of Udyog Aadhar Memorandum (UAM) by the MSE parties on Central Public Procurement Portal (CPPP) shall be mandatory. However, attested/Notarized copy of valid NSIC certificate or "Micro and Small" industry certificate must be submitted in this regard.

- 4.1 For the successful bidder, the EMD will be refunded only after completion of the work. No interest shall be payable towards EMD amount.
- 4.2 For the unsuccessful bidders, the EMD will be refunded only after the successful bidder has accepted the work order and the acknowledgment of the same has been received by the owner.
- 4.3 EMD is liable to forfeiture in the event of:
  - a) Withdrawal of offers during validity period of the offer

- b) Non acceptance of orders by the bidder within the stipulated time after placement of order.
- c) Any unilateral revision made by the bidder during the validity period of the offer.
- d) Non-performance of the bidder during the tenure of work.
- e) Bidders submitting false/fabricated/bogus documents in support of their credentials

# 5.0 **PRE-QUALIFICATION CRITERIA**

- 5.1 Average annual turnover of the tenderer shall be minimum of **Rs 43 Lakhs** during last three financial years ending 31<sup>st</sup> March, 2019.
- 5.2 The tenderer should have successfully executed Fire Protection Systems during past seven years ending 31<sup>st</sup> March, 2019 of the following values.
  - a. 3 jobs each of value not less than **Rs 14.5 Lakh** or
  - b. 2 jobs each of value not less than **Rs 18 Lakh** or
  - c. 1 job of value not less than Rs 29 Lakh

Copy of work orders and completion certificates / commissioning report from the owner/ consultant should be enclosed as supportive documents. Order copy issued by the owner to the consultant shall also be furnished if the completion certificate is issued by the consultant on behalf of the owner.

5.3 Tenderer should have PAN, GSTIN registration, PF registration, ESI registration. Copy of the same shall be submitted along with techno commercial offer.

# 6.0 **TENDER DOCUMENTS**

Tender Documents comprises two parts viz. Part-I (Un-priced) and Part-II (Priced). The Unpriced Part consists of Notice Inviting Tender, Condition of Contract, Technical Specification and Drawings. The Priced Part consists of Priced Schedule. Bidders are requested to download the tender document and read all the terms and conditions mentioned in the tender document and seek clarification if any, from Sk Abu Jafor, Manager, Mob 7893422855, e-mail: jafor.a@balmerlawrie.com. Any clause defining offline bid submission in the tender document shall not be considered.

# 7.0 **TENDER SUBMISSION**

The intending tenderers shall be deemed to have visited the site and familiarise themselves thoroughly with the prevailing site conditions before submission of the tender. Non familiarity with the site conditions will not be considered reason either for extra claim or for not carrying out the work in strict conformity with the drawing, specification and time schedule.

The tenderer is required to register on the e-procurement site https://balmerlawrie.eproc.in and submit their bids online.

For registration and online bid submission tenderer may contact the following officials at the HELP DESK of M/s C1 India on browsing to the website <a href="https://balmerlawrie.eproc.in">https://balmerlawrie.eproc.in</a> during

business hours (10:00 a.m. to 06:30 p.m.) from Monday to Friday (Excluding holidays of the Company):

Mr TirthaDas (Kolkata)	tirtha.das@c1india.com	+91-9163254290	MON - FRI
Mr Artha Ghosh (Kolkata)	partha.ghosh@c1india.com	+91-8811093299	MON - FRI
Mr CH. Mani Sankar	chikkavarapu.manisankar@c1	+91-8939284159	MON - SAT
(Chennai)	<u>india.com</u>		
Ms Ujwala Shimpi	ujwala.shimpi@c1india.com	+91-22-	MON - FRI
(Mumbai)		66865608	
Helpdesk Support (Kolkata)		+91-8017272644	MON - SAT
Escalation Level 1			
Mr.Tuhin Ghosh	tuhin.ghosh@c1india.c	+91-898116	5071
	<u>om</u>		

The tenderer shall authenticate the bid with his Digital Certificate for submitting the bid electronically on e-procurement platform and the bids not authenticated by digital certificate of the tenderer will not be accepted on the e-procurement platform.

All the tenderers who do not have digital certificates need to obtain Digital Certificate (with both Signing and Encryption Components). They may contact help desk of M/s C1 India.

The tenderer shall furnish the original Demand Draft / BG for EMD to the tender inviting authority so as to reach on or before the due date and time of the Tender either personally or through courier or by post and the receipt of the same within the stipulated time shall be the responsibility of tenderer. The Company shall not take any responsibility for any delay or non-receipt. If any of the documents furnished by the tenderer is found to be false/fabricated/bogus, the tenderer is liable for black listing, forfeiture of the EMD, cancellation of work and criminal prosecution. The tenderer is requested to get a confirmed acknowledgement from the Tender Inviting Authority as a proof of Hardcopies submission to avoid any discrepancy.

The bidders found defaulting in submission of hard copies of original Demand Draft / BG for EMD and other documents to the Tender Inviting Authority on or before the stipulated time in the Tender will not be permitted to participate in the Tender.

The bidder is requested to read all the terms and conditions mentioned in the tender Document and seek clarification if any from if in doubt from Sri A Boral.

The bidder should keep track of any Addendum / Corrigendum / Amendment issued by the Tender Inviting Authority on time-to-time basis in Company's website (www. Balmerlawrie.com) and e-procurement site (https://balmerlawrie.eproc.in). No separate newspaper advertisement shall be published for such Addendum / Corrigendum /

Amendment etc. The Company calling for tenders shall not be responsible for any claims/problems arising out of this.

The tenderer should complete all the processes and steps required for bid submission. The successful bid submission can be ascertained once acknowledgement is given by the system through bid submission number after completing all the process and steps. M/s C1 India is not responsible for incomplete bid submission by users. Tenderers may also note that the incomplete bids will not be saved by the system and are not available for the Tender Inviting Authority for processing.

Neither the Company (Balmer Lawrie & Co. Ltd.) nor the service provider (M/s C1 India) is responsible for any failure or non-submission of bids due to failure of internet or other connectivity problems or reasons thereof.

The hardcopies of the Bid Documents as explained above and also defined in clause no. 2.0 of Condition of Contract under sealed envelope should reach the office of Head (Engineering & Projects), Balmer Lawrie & Co Ltd, Engineering & Projects Department, 21 Netaji Subhas Road, Kolkata 700001, on or before the due date of submission of tender. The Bidders who are submitting the Bids in person are requested to drop the same in our tender box located at the entrance of 2nd floor at the above address.

## 8.0 **SUPPLY OF MATERIAL**

All materials required for the work shall be supplied by the Tenderer.

### 9.0 TAXES & DUTIES

All taxes and duties other than GST shall be included in the basic rate. GST shall be quoted separately as per Schedule of Work.

# 10.0 PAN, GSTIN registration, ESI, PF registration

Tenderers are required to submit PAN, GSTIN registration, Provident Fund registration and ESIC along with Un-priced part of their offer, failing which their offer may be liable to be rejected.

# 11.0 **INSTALLATION, COMMISSIONING & TRAINING**

The installation, testing and commissioning of automatic sprinkler system shall be carried out by competent engineers/technicians of the Tenderer at the work site. After commissioning, the successful bidder's engineer / technician shall impart necessary training to Owner's personnel in operating and maintaining the installed fire protection system. No separate charge shall be payable by the Owner for the purpose.

# 12.0 **NON-CONFORMANCE**

Tenders not conforming to the above mentioned requirements are liable to be rejected.

#### 13.0 **VALIDITY OF OFFER**

Tendered shall keep their offer valid for a period of **90 days** from the date of opening of Unpriced bid.

# 14.0 **QUANITITY VARIATION**

The quantity as mentioned in the Schedule of Work/ Price Bid is indicative. The selected bidder/Contractor shall however ascertain the exact quantity required at site and supply and install accordingly. As the work progresses, it is possible that there will be quantity variations to any extent & omission of items. Under all such circumstances, the rates should remain firm.

# 15.0 **FIRM PRICE**

The price should be firm and irrevocable and not subject to any change till the completion of Scope of Work.

## 16.0 RATES AND OTHER ENTRIES

- (a) The tenderer should quote for all items in the Schedule of Rates. If there is any discrepancy between unit rate and total amount, the unit rate will prevail.
- (b) The rates should be quoted in the same units as mentioned in the tender schedule of quantities.
- (c) All entries in the tender documents should be in ink / type. Corrections if any should be attested by full signature of the tenderer.
- (d) Every page of the tender document including annexure / enclosures shall be stamped and signed by the tenderer or his authorized representative thereby indicating that each and every page has been read and the points noted.

# 17.0 RIGHT TO ACCEPT OR REJECT TENDER

- 17.1 M/s Balmer Lawrie & Co Ltd reserves the right to accept or reject any or every tender without assigning any reason whatsoever / or to negotiate with the tenderer (s) in the manner it considers suitable. In the event of receipt of lowest price from more than one (1) bidders, fresh price bids shall be invited from the lowest bidders only to determine final lowest bidder for placement of order.
- 17.2 Bids of any tenderer may be rejected if a conflict of interest between the bidder and Company (Balmer Lawrie) is detected at any stage.
- 17.3 All the bids will be evaluated based on Pre-qualification and other criteria as mentioned in this NIT. Tenders of those bidders who are not meeting the pre-qualification criteria will not be considered for commercial evaluation.
- 17.4 Tender if submitted through e-mail or fax shall be summarily rejected.

17.5 Hard copy of Price Bid should not be submitted in the envelope containing Un-priced documents failing which the bid will be summarily rejected.

# 17.6 Clarifications / exceptions / deviations to the tender terms & conditions and specifications:

Balmer Lawrie & Co. Ltd. expects Tenderers to confirm compliance to tender terms & conditions and specifications, failing which the Tenderers are liable to be rejected. Hence all Tenderers in their own interest are advised to submit their bids in all respects confirming to all terms & conditions of the bid document.

Bids shall be evaluated based on the information / documents available in the bid. Hence Tenderers are advised to ensure that they submit appropriate and relevant supporting documentation alongwith their proposal in the first instance itself. Bids not complying the requirements of bid documents will be rejected without any further opportunity.

For any Technical clarifications / queries Tenderers are requested to contact from Sk Abu Jafor, Manager, Mob (7893422855) (from 10.00AM to 06.00PM, Monday - Friday).

for Balmer Lawrie & Co Ltd.

(G C Saha) Head (Engineering & Projects)

# **CONDITIONS OF CONTRACT**

## 1.0 DEFINITIONS

The following expressions hereunder and elsewhere in the contract documents used shall have the following meanings respectively assigned to them namely,

- 1.1 The "Owner/Client" shall mean M/s **Balmer Lawrie & Co. Ltd**; a company incorporated in India and having its Registered Office at 21, Netaji Subhas Road, Kolkata 700 001, and shall include its successors and assigns.
- 1.2 The "Project" shall mean "Supply, Installation, Testing & Commissioning of Fire Sprinkler System" at AMTZ, Visakhapatnam, Andhra Pradesh.
- 1.3 The 'Engineer-In-Charge'/'Engineer' shall mean the Engineer /Officer authorised by the 'Owner' for the purpose of the contract for overall Supervision and Co-ordination of site activity and certification of billing.

# 2.0 DETAILS OF HARD COPIES TO BE SUBMITTED ALONG WITH THE TENDER

The tender, as submitted, shall consist of the following:

- (i) Hard copy of Un-priced Tender Document duly filled in, stamped and signed by the Tenderer as prescribed in different clauses of Tender documents. No hard copy of priced bid shall be submitted. Priced bid shall only be submitted online. The price bid file in .xls format (excel file) shall be downloaded from the website, bidder to fill in their item-wise rates, print the excel file, write bidders details, stamp, sign, scan and upload the same.
- (ii) Earnest money amounting to and in the manner specified along with the Un-priced bid.
- (iii) The Power of Attorney or authorisation, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder, in original, when the power of attorney is a special "Power of Attorney" relating to the specific tender of Balmer Lawrie & Co Ltd only. A notarized true copy of the "Power of Attorney" shall also be accepted in lieu of the original, if the power of attorney is a general "Power of Attorney". However, photocopy of such notarized true copy shall not be accepted.
- (iv) Similar work done in past Seven years by the tenderer with copy of work orders and completion/commissioning certificate from the client/ consultant appointed by the client.
- (v) Audited annual reports for last three financial years.

- (vi) PAN / GSTIN / PF / ESI.
- (vii) Any other documents required in terms of this tender.

#### 3.0 RATES AND OTHER ENTRIES

- (a) The tenderer should quote for all items in the Schedule of Rates. Where discrepancy exists between the two, the rates expressed in words will prevail. Similarly if there is any discrepancy between unit rate and total amount, the unit rate will prevail.
- (b) The rates should be quoted in the same units as mentioned in the tender schedule of quantities.
- (c) All entries in the tender documents should be in ink / type. Corrections if any should be attested by full signature of the tenderer.
- (d) Every page of the tender document including annexure / enclosures shall be stamped and signed by the tenderer or his authorised representative thereby indicating that each and every page has been read and the points noted.

#### 4.0 RIGHT TO ACCEPT OR REJECT TENDER

The Owner reserves the right to accept or reject any or every tender without assigning any reason whatsoever / or to negotiate with the tenderer(s) in the manner the Owner considers suitable. The work may be split up if considered expedient.

# 5.0 SECURITY DEPOSIT

- (i) On acceptance of the Bid, Bidder shall within fifteen (15) days, deposit with Owner an Initial Security Deposit of **5% of the Contract value** (i.e. order value excluding taxes) and the same shall be in any of the following form:
- a) Bank draft drawn on a <u>Kolkata</u> Branch of any Scheduled Bank in favour of Balmer Lawrie & Co Ltd.
- b) Bank Guarantee executed by any Scheduled Bank as per proforma enclosed and shall be valid at least sixty days after the completion of work.
- (ii) If the Bidder fails to provide the Security Deposit within the period specified, such failure will constitute a breach of the Contract and Owner shall be entitled to award the Work elsewhere at Supplier's risk and cost. The EMD of the bidder to whom Contract was awarded, shall be forfeited
- (iii) No interest shall be payable against Security Deposit.

- (iv) As and by way of additional security, from every progress bill of Bidder, Security Deposit in the form of Retention Money (interest free) at the rate of 10% (inclusive of initial security deposit of 5%) of the Gross value of such bill as determined before payment shall be retained by the Owner. Owner can permit Bidder to replace the Security Deposit / Retention Money so retained by Bank Guarantee at his discretion after successful completion of the work.
- (v) Wherever the Security Deposit / Retention Money is furnished by Bidder in any form other than in cash or Demand Draft, Bidder shall be entirely responsible to keep such form of security deposit enforceable by extending the validity thereof before one month of date of expiry and keep them enforceable, until released by Owner after the Defect Liability Period.
- (vi) The Security Deposit / Retention Money shall remain at the entire disposal of Owner as a security for satisfactory execution and completion of the Work(s). Owner shall be at liberty to deduct and appropriate from the Security Deposit / Retention Money such damages (liquidated or otherwise) and other dues and recoveries from Bidder under this Contract and the amount by which Security Deposit / Retention Money is reduced by such appropriations, will be made by further deductions from Bidder's subsequent bills to that extent as to make up the Security Deposit / Retention Money.
- (vii) Notwithstanding anything to contrary, in as much as the Security Deposit is to be in cash with Owner, Owner shall be entitled to enforce any of the approved forms of Security Deposit furnished by Bidder at any time and realise cash thereof irrespective of whether or not Bidder disputes such right. However, if Bidder obtains the extension of the time limit, if any, for the enforceability of such form of Security Deposit and intimates Owner of such extension within one month before expiry, Owner may not enforce such form of Security Deposit, unless it has otherwise become enforceable.
- (viii) On due and satisfactory performance of all the obligations of Bidder under this Contract including completion of work in all respects, carrying out the obligations of Bidder during Defect Liability Period, Retention Money shall be released by Owner subject to recoveries, deductions and retentions therefrom as provided under the Contract.

# 6.0 TESTING & INSPECTION

(i) All materials required for the execution of the work should be new and should conform to applicable standard specification and approved by the Engineer-in-Charge before actually put to use. Commencement of work without prior approval shall be entirely at the risk and cost of the Contractor. No delay due to non-availability of the materials, tools, equipment etc. will be entertained by the Owner. In the case of certain Machinery / Equipment, the Engineer-in-Charge may inspect the item for approval, before they are brought to site.

- (ii) The Owner shall be entitled at all times at the risk of the Contractor to inspect and/or test by themselves or through any independent person(s) or agency (ies) appointed by the owner and/or to direct the Contractor to inspect and/or test all material(s), items and components whatsoever supplied or proposed for supply, for incorporation in the work inclusive, during the course of manufacture or fabrication by the Contractor and/or at the Contractors work or otherwise, such materials or items or components. The inspection and/or test shall be conducted at the expense of the Contractor and if conducted by the Contractor may be directed by the Owner to be conducted by agency (ies) nominated by Owner and/or in the presence of witness (ess) nominated by the Owner.
- (iii) The Contractor shall furnish to the Engineer-in-Charge for approval when requested or as required by the specification or other contract documents, adequate samples of material intended for incorporation in the works. Such sample to be submitted before the work is commenced permitting sufficient time for tests, examination(s) thereto by the Engineer-in-Charge. All materials furnished and incorporated in the work shall conform to the sample(s) in all respects.
- (iv) The Engineer-in-Charge shall be entitled to reject at any time any defective materials, item or components, (including special manufactured or fabricated items or components) supplied by the Contractor for incorporation in the works.
- (v) The Contractor shall at all times ensure highest standard of workmanship, relating to the work to the satisfaction of the Engineer-in-Charge. The Engineer-in-Charge shall have the power to inspect the work as also to test or instruct the Contractor to test the works or any structure, material or component thereto at the risk and cost of the Contractor, either by the Contractor or by any agency(ies) nominated by the Engineerin-Charge or Site Engineer on his behalf.
- (vi) The Contractor shall provide all facilities, instruments material / labour and accommodation required for testing the works (including checking the set time out of work) and shall provide Engineer-in-Charge all assistance necessary to conduct the test whenever and wherever required.
- (vii) The Engineer-in-Charge on inspection or test be not satisfied with the quality or workmanship of any work, structure, material, component (decision of the Engineerin-Charge being final in this behalf), the Contractor shall re-perform, replace, re-install and / or re-erect as the case may be such work, structure material or component, as no such rejected work, structure, material, item or component shall be re-used without the prior permission of Engineer-in-Charge.
- (viii) Notwithstanding any provided in the foregoing clauses hereto and notwithstanding the Engineer-in-Charge/ or his representative has inspected tested and/or approved any particular work, structure, material or component, such inspection, test or

approval shall not absolve the Contractor of his full responsibilities under the contract inclusive or relative to the specification, performance guarantee. The said inspection and test procedure being intended basically for satisfaction of the Owner / prima-facie erection and/or material and equipment supplied for incorporation in the work is in order.

- (ix) On no account shall the Contractor proceed with the covering up or otherwise placing beyond reach of inspection or measurement any work before necessary inspection, entries are filled in the Site Inspection Register by the Engineer-in-Charge or his authorised representative. Should the Contractor do so the same shall be uncovered at the Contractor's risk and expense for carrying out the inspection and measurement. Measurement of Work shall be recorded as per the direction of Engineer-in-Charge.
- (x) If any tests are required to be carried out in connection with the work or materials or workmanship not supplied by the Contractor, such tests shall be carried out by the Contractor as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by the Owner.
- (xi) The owner reserve the right to inspect the Equipment at Tenderer's works by them or through a third party nominated by the Owner. Tenderer will provide all assistance to Owner's inspector in carrying out such inspection at Tenderer's works free of any charges.

# 7.0 PERFORMANCE GUARANTEE:

## 7.1 Performance Guarantee:

- a) The Contractor shall guarantee that the equipment and workmanship of work done and any fittings designed / manufactured / supplied by him are as specified in the tender schedule and wherever there is nothing specifically mentioned shall correspond to the best available grade and quality as required for the application.
- b) The Contractor shall also guarantee that the work done and any fittings designed, manufactured, supplied, erected shall be as per prevailing relevant standard, codes and statutory practices / stipulations.
- c) The Contractor shall guarantee the work done and any fittings designed, manufactured, supplied, erected and tested by him against defective materials, poor workmanship, improper design, operation inadequacies & problems and failure from normal usage, for a period of 12 (twelve) calendar months after final acceptance of the work by the Owner. Performance Bank Guarantee shall be issued by any Nationalized / Scheduled Bank on basic value of material supplied and shall remain valid for above guarantee period.

# 7.2 Warranty:

The Contractor will repair and/or replace all defective parts, components / fittings, accessories etc. which shall be notified to them in writing within the Defect Liability Period Promptly at free of cost. The Contractor will provide similar warranty on the parts, components, fittings, accessories etc. repaired and/ or replaced.

## 8.0 SITE PARTICULARS

The intending tenderers shall be deemed to have visited the site and familiarised themselves thoroughly with the site conditions before submitting the tender. Non-familiarity with the site conditions will not be considered reason either for extra claims or for not carrying out the work in strict conformity with the drawings and specifications.

## 9.0 SUPPLY OF MATERIAL

- 9.01 All materials required for the work shall be supplied by the Contractor. In addition, all materials required for temporary and enabling work shall be arranged and provided by the Contractor. All incidental expenses, loading, unloading, transportation, handling etc. shall be the responsibility of the Contractor and cost towards such expenses should be included in the finished item rates.
- 9.02 All other materials, as required to complete the works in all respects according to the contract rates shall be inclusive of all freights, GST and other taxes, duties, loading, unloading, transporting, handling and storage charges etc.

#### 10.0 TIME FOR COMPLETION OF WORK

Time is the essence of the contract. The tenderer shall submit their plan to complete the whole work according to the overall time allowed for the execution of work as given in the Tender Documents and NIT.

- 10.0.1 The Contractor shall complete in all respects in accordance with the Contract, the entire work at each job site within the time specified in this behalf in the Time Schedule.
- 10.0.2 If the Owner so requires, the Progress Schedule in the form of CPM, giving the latest dates of starting and latest dates of finishing of various operations comprising the work as also the activities in the critical path and latest dates for achievement of specific milestones in respect of the work so as to complete in all respects the works (including testing and consequential operations) within the time provided in the Time Schedule. This Progress Schedule should also indicate the interlinking of the various activities and bring to light the specific/ critical items on which the inputs from the owner/ Engineer-in-Charge/ Consultant or other agencies, if any, would be required, to ensure adherence to the schedule.
- 10.0.3 If the Contractor shall fail to submit to the Owner/ EIC a Progress Schedule as envisaged above or if the Owner/EIC and Contractor fail to agree upon the Progress Schedule as envisaged

above, then the Engineer-in-Charge shall prepare the Progress Schedule (the dates of progress as fixed by the Engineer-in-Charge being final and binding upon the Contractor except as herein otherwise expressed provided), and shall issue the Progress Schedule so prepared to the Contractor, which shall then be the Approved Progress Schedule and all the provisions of clauses 10.0.2 shall apply relative thereto.

- 10.0.4 Any reference in the Contract Documents to the Approved Progress Schedule" or to the "Progress Schedule" shall mean the "Approved Progress Schedule" specified in clause 10.0.2 above or the "Progress Schedule" prepared and issued by the Engineer-in-Charge as specified in clause 10.0.3 above, whichever shall be in existence. In the absence of such approved Progress Schedule or such Progress Schedule prepared by the Engineer-in-Charge, the Progress Schedule first prepared by the Contractor (with incorporation of the Owner's / Engineer-in-Charge's comments thereon if any), shall until such approved Progress Schedule or such Progress Schedule prepared by the Engineer-in-Charge comes into existence, be deemed to be the Progress Schedule for the purpose of the contract.
- 10.0.5 Within 7(seven) days of the occurrence of any act, event or omission which, in the opinion of the Contractor, is likely to lead to delay in the commencement or completion of any particular work(s or operation(s) or the entire work at any job site(s) and in such as would entitle the Contractor to an extension of the time specified in this behalf in the Progress Schedule(s), the Contractor shall inform the site engineer and the Engineer-in-Charge in writing of the occurrence of the act, event or omission and the date of commencement of such occurrence. Thereafter, if even upon the cessation of such act or event or the fulfilment of the omission, the Contractor in his opinion that an extension of the time specified in the Progress Schedule relative to the particular operation(s) or item(s) or work or the entire work at the job site(s) is necessary, the Contractor shall within 7 (seven) days after the cessation or fulfilment as aforesaid make a written request to the Engineer-in-Charge for extension of the relative time specified in the Progress Schedule and the Engineer-in-Charge may at any time prior to completion of the work extend the relative time of completion in the Progress Schedule for such period(s) as he considers necessary, if he is of opinion that such act, event or omission constitutes a ground for extension of time in terms of the Contract and that such act, event or omission has in fact resulted in insurmountable delay to the Contractor.
- 10.0.5.1 The application for extension of time made by the Contractor to the Engineer-in-Charge should contain full details of
  - a) The notice under clause 10.0.5 with a copy each of the notice sent to the Engineer-in-Charge and Site Engineer.
  - b) The activity for the Progress Schedule affected.
  - c) The bottleneck(s) or obstruction(s) perceived/ experienced, and the reason(s) therefor,
  - d) Extension required/ necessitated on account of c) above

- e) Extension required/ necessitated on account of reasons attributable to the Owner,
- f) Extension required/ necessitated on account of force majeure reasons, and
- g) The total extension of time (if any) required/ necessitated for completion, taking the above into account and after eliminating all overlaps.
- 10.0.5.2 The opinion/ decision of the Engineer-in-Charge on this behalf and as to the extension of time necessary shall, subject to the provisions of clause 10.0.6 hereof, be final and binding upon the Contractor.
- 10.0.6 Subject as elsewhere herein or in the contract documents expressly provided, only the existence of force majeure circumstances as defined in 10.0.7 hereof shall afford the Contractor a ground for extension of time for completion of the work or any part of the work or any operation(s) involved therein, and specifically without prejudice to the generality of the foregoing, inclement weather, strike, shutdown, third party breach, delay in supply of material(s) or commercial hardship shall not afford the Contractor a ground for extension of time or relieve the Contractor of his/its full obligations under the Contract, nor will any forced shutdown or idleness or other impediment in progress or completion of the work due to any reason whatsoever afford the Contractor a ground for extension of time or relieve the Contractor of his/its full obligations under the Contract except and to the extent otherwise elsewhere herein specifically provided, nor shall any shut down or idle time charges be payable by the Owner to the Contractor for delay in the commencement, progress or completion of the work due to any reason whatsoever, including due to the existence of force majeure circumstances.
- 10.0.7 The term "Force Majeure" as employed in this contract shall mean wars (declared or undeclared) or revolutions, civil wars, tidal waves, fires, major floods, earthquakes, epidemics, pandemic, quarantine restrictions and freight embargoes and transporters strikes affecting the country as a whole.
- 10.0.8 Upon an extension of the time for completion of the work or any part of the work or any operation(s) involved therein pursuant to clause 10.0.5 hereof, the extended date/time of completion shall be deemed to be the relative date of completion in the Progress Schedule, and such extension shall constitute the sole remedy of the Contractor for and/or arising out of such delays, and the Contractor hereby waives any and all contrary rights.
- 10.0.9 The mere fact that the Owner shall not have terminated the contract or that the Owner or Engineer-in-Charge has permitted the Contractor, for the time being to continue with the work for its completion shall not prejudice the full rights and remedies available to the Owner under the contract arising out of the delayed completion, including the right of Liquidated Damages and/or termination. Such permission(s) shall unless specifically stated to be an extension of time under clause 10.0.5, not be construed as extension(s) of time extension under clause 10.0.5, and shall merely constitute an indication or intimation, as the case may

be, of the Owner's willingness, for the time being, to accept the delayed completion, subject to its rights under the contract.

10.0.10 No assurance, representation, promise or other statement by any personnel, engineer or representative of the Owner in relation to extension of time for commencement or completion of any work(s) or operation thereof or of the entire works under the contract shall be binding upon the Owner or shall constitute an extension of time for commencement or completion of the entire works or any part or operation thereof within the provisions of clause 10.0.5, unless the same has been communicated to the Contractor in writing by the Engineerin-Charge under clause 10.0.5 and in writing specifically states that it embodies an extension of time within the provisions of clause 10.0.5, and without prejudice to the afore-going, the mere agreement or prescription or signing of a Progress Schedule by the site engineer or any site representative of the Owner at variance of the progress schedule, as the case may be, referred to in clauses 10.0.2, 10.0.3 and/or 10.0.4 hereof or containing an extended time of commencement or completion in respect of the entire work(s) or any part or operation thereof shall not anywise constitute an extension of time in the terms of the Contract so as to bind the Owner or relieve the Contractor of all or any of his liabilities under the Contract, nor shall constitute a promise on behalf of the owner or a waiver by the Owner of any of its rights in terms of the contract relative to the performance of the contract within the time specified or otherwise, but shall be deemed only(at the most) as a guidance to the Contractor for better organising his work on a recognition that the Contractor has failed to organise his work and/or perform the same within the time specified in the Progress Schedule established within the provisions of clause 10.0.2 or clause 10.0.3 or clause 10.0.4 hereof, as the case may be.

#### 11.0 TAXES & DUTIES

Rates shall be inclusive of all taxes, duties etc. as applicable.

# 12.0 LIQUIDATED DAMAGE

(i) If the Contractor is unable to complete the jobs specified in the scope of work within the period specified in NIT, it may request owner for extension of the time with unconditionally agreeing for payment of LD. Upon receipt of such a request, owner may at its discretion extend the period of completion and shall recover from the Contractor's running account bill, as an ascertained and agreed Liquidated Damages, a sum equivalent to **0.5**% of basic contract value for each week of delay or part thereof. The LD shall be limited to **5**% of the total basic contract value.

The parties agree that the sum specified above is not a penalty but a genuine preestimate of the loss/ damage which will be suffered by the owner on account of delay/ breach on the part of the Contractor and the said amount will be payable without proof of actual loss or damage caused by such delay/breach.

(ii) Notwithstanding what is stated in Clause above, the Owner shall have the right to employ any other agency to complete the remaining work at the risk and cost of the

Contractor, in the event of his failing to complete the work within the stipulated time or in the even progress of Contractor's work is behind schedule, as judged by the engineer-in-charge.

- (iii) Then the Engineer-in-Charge upon receiving necessary approval from competent Authority may in writing make a fair and reasonable extension of time for completion of the works as per provision of clause no. 10, provided further that the Contractor shall constantly use his best endeavour to the satisfaction of the Engineer-In-Charge to proceed with the works. Nothing herein shall prejudice the rights of the Contractor under clause herein above.
- (iv) The Contractor may seek time extension for delay or anticipated delay as per clause no. 10.0.5 for reasons not attributable to them and in such case time extension may be given without imposition of LD.

#### 13.0 TERMS OF PAYMENT

- (i) No mobilization advance shall be paid to the Contractor.
- (ii) **70%** against supply of item wise materials upon receiving of materials at site in good condition and duly inspected and certified by the Engineer-in-Charge.
- (iii) **20%** against successful installation upon verification and certification by the Engineer-in-Charge.
- (iv) **10**% against supply successful commissioning and after issuance of job completion certificate by owner.
- (v) On each running account bill 10% of basic order value will be withheld as retention money. The Contractor shall, within fifteen (15) days, submit to the Owner Initial Security Deposit equivalent to 5% of the total basic contract value. During payment of monthly running account bills, the initial security deposit will be adjusted first against 'Retention Money', but in no case total retention including initial security deposit shall exceed 10% of the executed basic value of work at any stage. The retention money will be released after completion and acceptance of work against issue of Bank Guarantee of the equal amount for defect liability and performance maintenance period, which shall be twelve (12) months from the date of completion of job. Performance Bank Guarantee shall be issued by any Nationalized / Scheduled Bank on basic value of material supplied and shall remain valid for above guarantee period.
- (vi) Final payment shall be released based upon the measured installed quantity only.

#### 14.0 ARBITRATION

Any dispute or difference arising under this Contract shall be referred under jurisdiction of Kolkata to a sole arbitrator to be appointed by the Chairman & Managing Director, Balmer Lawrie & Co. Limited and the provisions of Arbitration and Conciliation (Amendment) Act, 2015 including any statutory modifications or enactment thereof shall apply to the Arbitration proceedings. The fees of the arbitrator, if any, shall be shared equally by both the parties. The award shall be a speaking award stating reason therefor and is final & binding on the parties. The proceeding shall be conducted in English language and courts at Kolkata will have exclusive jurisdiction to settle any dispute arising out of this contract.

#### 15.0 EXTRA ITEMS OF WORK

During the course of execution of the work, should the Contractor come across items of work which are not covered under the Schedule of Rate or not included therein, the Contractor shall draw the attention of the Owner / Engineer-in-Charge to the same and such items of work shall be treated as extra only with the prior approval of Engineer-in-Charge in writing. Contractor shall submit a quotation along with the rate analysis for such accepted extra items before he commences work or purchases the materials in connection with such items.

For extra items, rates shall be derived from similar item rates included in the schedule of work. Where there is no such similar item available in the schedule, rate shall be analysed as follows:

Rate for extra item = Cost of material including transportation till site (a) + cost of labour inclusive of all necessary tools, tackles, equipment, machinery and consumable (b) required to carry out the work + 15% of (a+b) towards profit and overhead + taxes, duties etc.

#### 16.0 RIGHT OF OWNER TO TERMINATE THE CONTRACT

(i) If the Contractor being an individual or a firm commits any 'Act of Insolvency' or shall be adjudged as insolvent or being an Incorporated Company shall have an order for compulsory winding up made against it, or pass an effective resolution for winding up voluntarily or subject to the supervision of the Court or shall be unable to carry out and fulfil the contract and to give security therefore, is so required by the Engineer-In-Charge.

Or if the Contractor (whether an individual, firm or incorporated company) shall suffer execution to be issued.

Or shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractor.

Or shall assign or charge, encumber or sublet this contract without the consent in writing of the Engineer-In-Charge first obtained.

Or shall charge or encumber this contract or any payments due or which may become due to the Contractor thereunder.

Or if the Engineer-In-Charge shall certify in writing to the Owner that the Contractor -

- a) has abandoned the Contract or
- b) has failed to commence the works, or has without any lawful excuse under these conditions, suspended the progress of the works for 14 days after receiving from the Engineer-In-Charge written notice to proceed or
- c) has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon or
- d) has used sub-standard or inferior material or materials not conforming to the specifications or has employed inferior workmanship in carrying out the works or part thereof or has not exercised due diligence in execution of the said work, or
- has neglected or failed persistently to observe and perform all or any of the acts, deeds, matters or things by this Contract to be observed and performed by the Contractor requiring the Contractor to observe or perform the same, or
- has to the detriment of good workmanship or in defiance of the Engineer-In-Charge's instructions to the contrary, sub-let or sub-contracted any part of the contract, or
- g) has failed to comply with the Engineer-In-Charge's instructions, or
- h) has in the opinion of the Engineer-In-Charge committed any breach of this Contract, then and in any of the said cases the Owner with the written consent of the Engineer-In-Charge may notwithstanding any previous waiver, after giving seven days' notice in writing to the Contractor terminate the Contract, but without hereby affecting the right of the Owner of the powers of the Engineer-In-Charge or the obligations and liabilities of the Contractor in respect of work, the contract shall continue enforce as fully as if the contract has not been so determined and the obligations of the Contractor in respect of work subsequently executed shall continue as if the works subsequently executed has been executed by or on behalf of the Contractor. And further, the Owner by its agents or servants shall been titled forthwith to enter upon and take possession of the works and all plants, tools, scaffoldings, sheds, machinery, steam and other power implements, machinery equipment and materials lying upon the site or the adjoining lands or roads and use the same as its own property and to employ the same by means of its own servants and

workmen in carrying on and completing the work or by employing any other Contractor and the Contractor shall not in any way interrupt or do any act, matter or things to prevent, intimidate or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the work. When the works shall be completed or as soon thereafter as convenient, the Engineer-In-Charge shall give a notice in writing to the Contractor to remove his surplus materials and plant and should the Contractor fail to do so within the period of 14 days after receipt thereof by him, the Owner shall sell the same either by public auction or a private sale and shall be given credit to the Contractor for the amount realized. The Engineer-In-Charge shall thereafter ascertain and certify in writing under this hand what (if anything) shall be due or payable to or by the owner, the expense or loss which the owner shall have been put to in procuring the works to be completed and the amount, if any, owing to the Contractor and the amount which shall be so certified, shall thereupon be paid by the owner to the Contractor or by the Contractor to the Owner, as the case may be and the Certificate of the Engineer-In-Charge shall be final and conclusive and binding on the parties hereto. In the event of termination under this Clause, the Owner shall not be bound by any provision of this Contract to make any further payment to the Contractor until the said works are completed.

- (ii) Owner shall, at any time, be entitled to determine and terminate the Contract, if in the opinion of the Owner the cessation of the Work becomes necessary owing to paucity of funds or for any other cause whatsoever, in which case the cost of approved materials at the Site at current market rates as verified and approved by Engineer-In-Charge and of the value of the Work done to date by the Contractor shall be paid for in full at the specified in the Contract. A notice in writing from the Owner to the Contractor of such determination and termination and the reason therefore shall be the conclusive proof of the fact that the Contract has been so determined and terminated by the Owner.
- (vii) Should the Contract be determined under sub-clause of this clause and the Contractor claims payment to compensate expenditure incurred by him in the expectation of completing the Work, the Owner shall consider and admit such claim as are deemed fair and reasonable and are supported by the vouchers to the satisfaction of the Engineer-In-charge. The Owner's decision on the necessity and propriety of such expenditure shall be final and conclusive and binding on the Contractor.

# 17.0 LABOUR LAWS

(i) No Labour below the age of eighteen (18) years shall be employed on Work. In case female workers are engaged, requisite provisions shall be made as per the statute.

- (ii) Contractor shall not pay less than what is provided under law to labourers engaged by him on Work.
- (iii) Contractor shall at his expense comply with all labour laws and keep Owner indemnified in respect thereof.
- (iv) In addition to above, rules and regulations as contained in Contract Labour (Regulation and Abolition) Act, 1970 will also be applicable for this contract. For the purpose of registration as per the above Act, Contractor may contact Owner for further details.
- (v) Contractor shall secure full safety of the workers / employees engaged by him in the Site premises and shall take at his own cost, insurances and such other safety regulations for the said purpose.

#### **18.0 INSURANCE**

Contractor shall at his own expense carry out and maintain insurance with reputable companies to the satisfaction of the Owner as follows:

# **Employee's Compensation and Liability Insurance**:

Contractor shall obtain Workmen Compensation policy in his name in respect of contractor's employees to be engaged for the work towards compensations as admissible under the Employee's Compensation Act, 1923 and Rules framed thereunder upon death/disablement and also medical treatment of a worker and the same has to be produced to the Engineer-in-Charge before start of the work. Owner should be mentioned as the Beneficiary.

If any of the work is sublet, after necessary approval by the Owner, the contractor shall require the Sub-contractor to provide Employee's Compensation and Liability Insurance for the Sub-contractor's employees, if such employees are not covered under the Contractor's Insurance.

#### 19.0 HSE REQUIREMENTS BY CONTRACTORS

## Housekeeping

Contractors shall ensure that their work area is kept clean tidy and free from debris. The work areas must be cleaned on a daily basis. Any disposal of waste shall be done by the Contractor.

All equipment, materials and vehicles shall be stored in an orderly manner. Access to emergency equipment, exits, telephones, safety showers, eye washes, fire extinguishers, pull boxes, fire hoses, etc. shall not be blocked or disturbed.

# **Confined Space**

Before commencing Work in a confined space the Contractor must obtain from Owner a Permit to Work, the Permit to Work will define the requirements to be followed.

As minimum Contractors must ensure the following:

- a) Confined spaces are kept identified and marked by a sign near the entrance(s).
- b) Adequate ventilation is provided
- c) Adequate emergency provisions are in place
- d) Appropriate air monitoring is performed to ensure oxygen is above 20%.
- e) Persons are provided with Confined Space training.
- f) All necessary equipment and support personnel required to enter a Confined space is provided.

# **Tools, Equipment and Machinery**

The Contractor must ensure that all tools & equipment provided for use during the Work is:

- a) suitable for its intended use;
- safe for use, maintained in a safe condition and where necessary inspected to
   ensure this remains the case (any inspection must be carried out by a competent
   person and records shall be available);
- Used only by people who have received adequate information, instruction and training to use the tool or equipment.
- d) Provided with Earth leakage circuit breaker (ELCBs) at all times when using electric power cords. Use of electrical tape for temporary repairs is prohibited.

#### **Working at Height**

Any Work undertaken where there is a risk of fall and injury is considered to be working at height.

For any Contractor Personnel working at height, Contractors shall provide fall prevention whenever possible and fall protection only when fall prevention is not practicable. Before

commencing Work in a height the Contractor must obtain from Owner a Permit to Work, the Permit to Work will define the requirements to be followed. Supervisor must be present at all point of time, to ensure no deviation occur during the course of work.

# Fall Prevention System

Fall prevention systems (e.g. fixed guardrails, scaffolds, elevated work platforms) must provide protection for areas with open sides, including exposed floor openings.

# Fall Protection Systems

Where fall protection systems are used then the Contractor must ensure the following is applied:

- (ii) Only approved full body harness and two shock-absorbing lanyards are used,
- (iii) Prior establishment of a rescue plan for the immediate rescue of an employee in the event they experience a fall while using the system,
- (iv) Anchorage points must be at waist level or higher; and capable of supporting at least the attached weight,
- (v) Lifeline systems must be approved by Owner before use.
- (vi) Use of ISI marked industrial helmet at all point of time.

## Scaffolding

All scaffolds shall subject to a documented inspection by a competent person and clearly marked prior to use. The footings or anchorage for scaffolds shall be sound, rigid and capable of carrying the maximum intended load without settling or displacement. All scaffolding materials should be of MS tubular type.

Guardrails and toe-boards shall be installed on all open sides and ends of scaffold platforms. Scaffolds shall be provided with an access ladder or equivalent safe access. Contractor Personnel shall not climb or work from scaffold handrails, mid-rails or brace members.

# **Stairways and Ladders**

Ladders should only be used for light duty, short-term work or access in line with the below and the Site Requirements.

- i) Fabricated ladders are prohibited.
- ii) Ladders will be secured to keep them from shifting, slipping, being knocked or blown over.

- iii) Ladders will never be tied to facility services piping, conduits, or ventilation ducting.
- iv) Ladders will be lowered and securely stored at the end of each workday.
- v) Ladders shall be maintained free of oil, grease and other slipping hazards
- vi) Ladders will be visually inspected by a competent person and approved for use before being put into service. Each user shall inspect ladders visually before using.
- vii) Ladders with structural defects shall be tagged "Do Not Use," immediately taken out of service, and removed from the Site by the end of the day.

#### **Lifting Operations**

# **Cranes and Hoisting Equipment**

Contractors shall operate and maintain cranes and hoisting equipment in accordance with manufacturer's specifications and legal requirements.

Only Contractor Personnel trained in the use of cranes and hoists are permitted to use them.

# **Lifting Equipment and Accessories**

All lifting equipment / accessories e.g., slings, chains, webbing, chain blocks, winches, jacks etc shall be indicated with their safe working load have an identification number visible on the unit and be inspected and tested in accordance with legal requirements.

Damaged equipment / accessories and equipment shall be tagged "out of use" and immediately removed from Site.

# Lockout Tag out ("LOTO")

Prior to performing work on machines or equipment, the Contractor shall ensure that it is familiar with LOTO and Permit to Work procedures and that all of its affected Contractor Personnel receive the necessary training.

#### **Barricades**

Floor openings, stairwells, platforms and walkways, and trenching where a person can fall any distance shall be adequately barricaded and where necessary, well lit. Where there is a risk of injury from a fall then rigid barriers must be used.

Barricades must also be used to prevent personnel entering an area where risk of injury is high e.g., during overhead work activity or electrical testing etc. Such barricading must provide clear visual warning.

# **Compressed Gas Cylinders**

Gas cylinder shall be securely stored and transported, and identified and used in line with the local requirements. Hose lines shall be inspected and tested for leaks in line with local requirements. Flash Back arrestor to be used to prevent any explosion due to back fire.

# **Electrical Safety**

Prior to undertaking any work on live electrical equipment the Contractor must obtain a Permit to Work from Owner. Where ever possible live work should be avoided. Any control measures highlighted shall be implemented prior to work commencing.

The below measures will be taken:

- a) Work practices must protect against direct or indirect body contact by means of tools or materials and be suitable for work conditions and the exposed voltage level.
- b) Energized panels will be closed after normal working hours and whenever they are unattended. Temporary wiring will be de-energized when not in use.
- c) Only qualified electrical Contractor Personnel may enter substations and/or transformer and only after being specifically authorized by Owner.

#### **Hot Works**

A Permit to Work must be obtained from Owner prior to any hot works (welding, grinding, open flame work). Suitable fire extinguishing equipment shall be immediately available. Objects to be welded, cut or heated shall be moved to a designated safe location, or, if they cannot be readily moved, all movable fire hazards in the vicinity shall be taken to a safe place. Personnel working around or below the hot works shall be protected from falling or flying objects.

Prior to the use of temporary propane or resistance heating devices approval must be obtained from Owner.

# Trenching, Excavating, Drilling and Concreting

A Permit to Work must be obtained from Owner and all underground lines, equipment and electrical cables shall be identified and located prior to beginning the work. The Contractor shall assign a competent Contractor Personnel to all trenching and excavation work.

Safe means of access and egress shall be located in trench excavations. Daily inspections shall be conducted by a competent Contractor Personnel for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems or other hazardous conditions.

Physical barriers shall be placed around or over trenches and excavations. Flashing light barriers shall be provided at night.

# **Environmental Requirements**

## **Waste Management**

The Contractor is responsible to remove any waste generated by the work being done on the Site. The Contractor must dispose of the waste in line with the relevant local legislative requirements. The waste disposal route shall be documented and made available for Owner to review at any time and may be subject to Owner's prior approval.

Wastes (includes rinse from washing of equipment, PPE, tools, etc) are not to be poured into sinks, drains, toilets, or storm sewers, or onto the ground. Solid or liquid wastes that are hazardous or regulated in any way are not to be disposed of in general site waste receptacles.

# Spills

The Contractor is responsible for the provision of adequate spill kits/protection and the clean-up and disposal costs arising from such spills.

## **Emissions**

The Contractor shall identify and quantify any emission sources associated with the Works. The control measures associated with these emission shall be subject to the approval of Owner's Emissions include but are not limited to noise, dust, fumes, vapours.

# **BANK GUARANTEE VERIFICATION CHECK LIST**

	CHECK LIST	<u>YES</u>	<u>NO</u>
I	Does bank guarantee compare verbatim with standard Balmer Lawrie & Co Ltd proforma for BG		
II. a.	Has the executing officer of the BG indicated his name, designation and power of attorney No./ Signing Power No. etc. on BG		
b.	Is each page of BG duly signed/initialed by the executant and last page is signed with full particulars as required in the Balmer Lawrie's standard proforma of BG and under the seal of the Bank.		
C.	Does the last page of the BG carry the signature of two witnesses along side the signature of the executing Bank Manager		
III. a.	Does the non judicial stamp paper for BG purchase in the name of BG issuing Bank		
b.	Is the BG on non-judicial Stamp paper of value Rs. 100/- (Rupees One Hundred only)		
C.	Is the date of sale of non-judicial stamp paper shown on the BG and the stamp paper is issued not more than six months prior to date of execution of BG		
IV. a.	Are the factual details such as bid specifications No., LOI No., Contract price etc. correct		
b.	Whether over-writing/ cutting, if any on the BG authenticated under signature and seal of executant		
V. a.	Is the amount of BG in line with contract provisions / agreement /tender		
b.	Is the validly of BG in line with contract provisions / agreement /tender		
VI. VII.	Covering letter from bank enclosed with the BG BG shall be from a Nationalised/ Scheduled Bank only		

# PROFORMA OF THE GUARANTEE **BID BOND/ EARNEST MONEY DEPOSIT**

	r Lawrie a- 700 0	e & Co. Ltd. 001
for the		
forms	therein	ns of Tender provide that the Bidder shall pay a sum of Rs (Rupees only) (hereinafter called "the said amount") as full Earnest Money Deposit in the mentioned. The forms of payment of Earnest Money Deposit include guarantee to be Scheduled Bank.
and in	consid	
Bank) BALM!	having ER LAW (F	by these presents, we,(name of the Bank) of(address of the our office, inter alia, at(hereinafter called "the Bank") are bound unto RIE & CO. LTD(address) (hereinafter called "the Purchaser") in the sum of Rs. Rupeesonly) for which payment will truly be made to the Purchaser, the
Bank b	inds its	elf, its successors and assigns by these presents this day of 2019.
THE CO	ONDITIO	DNS of this obligation are :
1.	If the E	Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the m; or
2.		Bidder, having been notified of the acceptance of its bid by the Purchaser during the of bid validity;
	a)	fails or refuses to execute the Contract Form if required; or
	b)	fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.

[2]

We undertake to pay the Purchaser up to the said amount upon receipt of its first written demand, without the Purchaser having to substantiate their demand, provided that in their demand the Purchaser shall mention that the amount claimed by them is due owing to the occurrence of one or both of the two conditions.

This guarantee will remain in force upto ....... (date of expiry) including the ..... days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

Notwithstanding anything contained herein:

- iii) We are liable to pay the guaranteed amount or pay part thereof under this Bank Guarantee only if you serve upon us a written claim or demand on or before ............ (last date of validity)

We, ....... (name of the Bank) undertake not to revoke this guarantee during its currency except with your previous consent in writing.

Your faithfully,

(Specimen Signature)

# BANK GUARANTEE (PERFORMANCE)

Letter of Guarante	e No.
Dated : the	day of
(set o	s executed at Kolkata on the day ofby out full name and address of the Bank) (hereinafter referred to as "the Bank" which nless expressly executed or repugnant to the context or meaning thereof mean and ors and assigns).
within the meaning Road, Kolkata – 7 dated (h pursuant thereto N Contractor) (herei context so rec Contractor for the	Lawrie & Co. Ltd. (local address),
thereof an Order b	e quotation of the Contractor had been accepted by the Company and in pursuance peing No
at their/his/its o of the said Tende Agreement dated t entered into by an terms of the said T	der the terms of the said Order the Contractor is required to furnish the Company wn costs and expenses a Bank Guarantee for Rs
	e Contractor had agreed to provide to the Company a Bank Guarantee as security mance of their/his/its obligations truly and faithfully as hereinbefore mentioned.

[2]

# NOW THIS GUARANTEE WITNESSETH as follows:

1.	In consideration of the aforesaid premises at the request of the Contractor, we (set out the full name of the Bank) the Bankers of the Contractor shall
	perform fully and faithfully their/his/its contractual obligations under the Agreement dated the
2.	We,
3.	The Guarantee is issued as security against due performance of the obligations of the Contractor or under the Agreement aforesaid and the said Tender and the said Order hereinbefore mentioned and subject to the conditions that our liabilities under this Guarantee is limited to a maximum sum of Rs (Rupees
4.	We, (set out full name of the Bank) further agree that the undertaking herein contained shall remain in full force for a period of months from the date of the satisfactory execution of the Contract.
5.	This Guarantee shall not be affected by any amendment or change in the Agreement or change in the constitution of the Bank and/or the Company and/or the Contractor.
6.	We (set out full name of the Bank) undertake not to revoke this Agreement during its currency except with the previous consent of the Company in writing.
7.	All claim under this Guarantee must be presented to us within the time stipulated after which date the Company's claim/right under this Guarantee shall be forfeited and we,(set out full name of the Bank) shall be released and discharged from all liabilities hereunder.
	Contd3/-

Date :

8.	This instrument shall be returned upon its expiry or settlement of claim(s) if any, thereunder
9.	Notwithstanding anything contained hereinbefore our total liabilities under this Guarantee shall not exceed a sum of Rs
10.	We have power to issue this guarantee in your favour under our Memorandum and Articles of Association and the undersigned has full power to execute this Guarantee under Power of Attorney dated the
Place	:

# PROFORMA OF THE GUARANTEE (SECURITY DEPOSIT)

Balmer Lawrie & Co. Ltd. Kolkata- 700 001

Dear Sir,

(here Tende	Messrs/Mr(set out full name and address and constitution of the Contractor) inafter referred to as "the Contractor") filed their/his/its quotation against your Tender being er No dated (hereinafter referred as "the said Tender") for the work
Orde	r being No dated (hereinafter to as "the Order") was issued by you to the ractor.
Rs the fo	conditions of the said Tender, inter alia, requires that the Contractor shall pay a sum of only) as full security deposit (hereinafter referred to as "the security deposit") in orm therein mentioned. The form of payment of security deposit includes a guarantee to be steed by a Scheduled Bank.
and a name	aid Messrs/Mr (set out full name of the Contractor) have/has approached us their/his/its request and in consideration of the premises We
3	We,
2.	We,
	Contd2/-

[2]

3.	Your right to recover the said sum of Rs us in the manner aforesaid will not be affect dispute or disputes is/are pending before a or authorities.	ted or suspended by reason	of the fact that any			
4.	winding up, dissolution or change of constit	arantee herein contained shall not be determined or affected by liquidation or g up, dissolution or change of constitution or insolvency of the said Messrs/Mr (set out the full name of the Contractor), but shall in all respect, and for coses be binding and operative until payment of all the money due to you in respect liabilities is paid,				
5.	Our liability under this guarantee is restricte only).	estricted to Rs (Rupees				
6.	Our guarantee shall remain in force and effect until (set out the date of expiry and unless a claim or demand in writing is made against us under this guarantee before the expiry of six months from the aforesaid date i.e					
7.	We , (set out full na Guarantee during its currency except with y					
8.	We,					
Yours f	faithfully,					
	:(Place)	(Signature of Office	r on			
•••••	(Date)	behalf of) (Set out name of the	e Bank)			

# **TECHNICAL SPECIFICATION**

# **FOR AUTOMATIC FIRE SPRINKLER SYSTEM**

# **FOR**

# **CENTRAL WAREHOUSE, AMTZ VISAKHAPATNAM**

### 1.0.0 GENERAL

### 1.1.0 Intent of Specification

- 1.1.1 This specification is intended to cover residual engineering, supply, fabrication, erection, testing and commissioning of the automatic fire sprinkler system, as per enclosed Schedule of Work, drawings and tender terms & conditions inclusive of the supply of all labour, supervision, tools, equipment and erection materials as necessary.
- 1.1.2 The specification shall be read in conjunction with the Conditions of Contract, Schedule of Work/Bill of Quantity as enclosed with this Specification. However, in the event of any conflict between Schedule of Work/Bill of Quantity and Technical Specification OR item description mentioned in Schedule of Work/Bill of Quantity shall prevail.

#### 1.2.0 Standards & Codes

The complete supply and installation work for the equipment and accessories covered under this specification shall be designed, manufactured, erected, tested and commissioned in accordance with the latest IS. In cases where IS are not available, the equipment and accessories shall conform to the latest publication of recognized National Standard Institutions.

All fire-protection equipment and installation work shall also conform to National Building Code and local Fire Department. Fire Department and Fire Insurance Regulations as regards safety, earthing and other essential provisions specified therein for installation and operation of the systems.

Nothing in this specification shall be construed to relieve the CONTRACTOR of this responsibility.

#### 2.0.0 SCOPE OF WORK

- 2.1.0 The details of various equipment relevant to the Fire sprinkler system have been elaborated in the subsequent sections of this document.
- 2.1.1 All equipment, materials, hardware and accessories to be supplied by the bidder shall be brand new ones and make specified in the tender. For other approved equivalent make, prior written approval of the owner shall be obtained for which detail technical document & Data sheet for all such items with make etc. shall be furnished along with application for owner review and acceptance.

- 2.1.2 All relevant drawings, technical data sheets and technical leaflets/catalogues, Test Certificates of major items shall be submitted.
- 2.1.3 Furnishing of all labour, skilled and unskilled, supervisory personnel, tools and tackles for fabrication/erection, testing equipment, implements, supplies, consumables and hardware for timely and efficient execution of the site work.
- 2.1.4 The item of work to be performed on all equipment and materials shall include but not be limited to the following:

Receiving, unloading of the materials at site

Opening, inspection and reporting all damages and short supply of items.

Arranging to repair and/or re-order all damaged and short supply items.

Storing at site with suitable all weather protection.

Side-Shifting of materials as directed by Engineer-in Charge

Assembly, erection and complete installation.

Necessary co-ordination between works done by the other contractors.

Final check-up, testing and commissioning in presence of owner's representative.

Trial run for seven days, rectification of defects, if any and adjustment as necessary.

- 2.1.5 Field modification carried out shall be marked up red on one set of drawing. Based on the mark up, as built drawing will be prepared.
- 2.1.6 Preparation of cable schedule for Fire Detection & Alarm System
- 2.1.7 Preparation of AS BUILT DRAWINGS and submission of the same in soft copies (in Auto cad 2004 / Microsoft Word/excel format) as well as in hard copies.
- 2.1.8 Reference shall be drawn to the "Schedule of Work" for quantity of major items.
- 2.1.9 Contractor will be given a place (only) for storing his materials, tools, tackles. Contractor shall construct a store (at his own cost) at that designated place to keep his materials, tools & tackles. Contractor shall make proper security arrangement for his materials till the installation is taken over by the owner. Owner will not be responsible for any theft/loss of materials.

2.1.10 Construction power and water: Contractor shall arrange for water and construction power at his own cost. However, if power is available during execution same may be provide to the contractor on chargeable basis.

### 3.0.0 TESTS

## 3.1.0 Pre-commissioning Tests at site

3.1.1 The installation work shall be tested by the contractor after completion of his erection/installation work with an advance notice to the engineer so that he or his authorized representative may witness the same also.

The contractor shall carry out Test as per relevant codes & standards and record the same in proper format. All piping after installation shall be tested for a hydrostatic test pressure of 10 Kg/Sq cm maintained for 24 hours. All joints and valves shall be checked for leaks and rectified and retested. During testing all valves except drain & air valves shall be kept fully open. After completion of the tests, the recorded test results shall be submitted to the owner for his approval and acceptance.

3.1.2 The test result of any installation or equipment or its part, if considered not satisfactory to the engineer, the concerned installation / equipment and its accessories shall be properly rectified by the contractor and shall be tested again to the satisfaction of the engineer by the contractor at his own cost.

### 4.0.0 FIRE SPRINKLER SYSTEM

The sprinkler system shall be installed as per tender drawings complete with sprinkler Installation Control Valves, Sprinkler main, branch and internal piping, valves, alarms and supporting arrangements, Sprinkler heads with spare sprinklers, Flow switches, and Connections to risers etc. All material shall be of the best quality conforming to specifications and subject to the approval of the Engineer-in-Charge. Pipes and fittings shall be fixed truly vertical/horizontal or on slopes required in a neat manner. Pipes shall be fixed in such a manner so as to provide easy accessibility for repair and maintenance. Pipes shall be securely fixed to walls and ceilings by suitable clamps at intervals specified. Only approved types of anchor fasteners shall be used for RCC ceilings and walls. Valves and other equipment shall be so located that they are easily accessible for operation, repairs and maintenance.

- 4.1 The sprinkler system shall incorporate one (as shown on drawings) installation Control valve assemblies comprising:
  - i) A main gate valve
  - ii) In and out pressure gauge

- iii) Test connection of adequate size with valve and orifice plate with pressure connections.
- iv) Water motor and gong with necessary piping isolating valve and strainer and drain.
- 4.2 The installation valve shall be straight through type suitable for wet pipe sprinkler systems. Valves shall be of cast iron with gun metal internals and suitable for vertical or horizontal installation. The valve clack shall be of cast gun metal with neoprene seal and retaining ring and shall incorporate a suitable non-return device to compensate for pressure fluctuations which should not mal-operate the clack. The gun metal internals shall provide for smooth waterways for:
  - i) Water valve through a retard chamber
  - ii) Test connection and drain
- 4.3 There shall be two pressure gauges, one for the mains side and another for the installation side. Each gauge shall have pressure damping brass piping with gun metal gauge and drain.
- 4.4 A test connection of adequate size as shown on drawings or as approved shall be provided with a shut-off gate valve, an orifice plate with pressure connections. The discharge from the test connection outlet shall be let to the nearest sump or drain as shown on drawings or as directed.
- 4.5 The mains water motor and gong shall preferably be of cast gun metal body and internals.

  The valve shall have an associated gun metal gate valve, strainer preceding the water motor.

  The water motor and gong shall be located on the discharge lead as shown in drawings or as directed.
- 4.6 All piping shall be mild steel heavy duty as specified under "Piping for Fire Fighting".

  Necessary line flushing valves shall be provided as shown on drawings or as required to.
- 4.7 The sprinkler heads shall be UL listed fixed temperature type with a quartzoid bulb containing liquid having high vapor pressure held in position by a forged GM yoke and deflector. The rated temperature of quartzoid bulb shall be 68 deg. C. The spacing shall however conform to the detailed drawing, in Co-ordination with electrical and other allied services at the ceiling level. An inspection test connection shall be provided on the down streamside of the system. Sprinklers for below false ceiling shall be fixed with recessed (two piece) type Rosette plate.

## 4.8 Piping

All pipes inside the building and where specified, outside the building shall be M.S. conforming to IS: 1239 - Heavy. Pipes 200 mm dia. and above shall be M.S. as per IS: 3589 with minimum 6 mm wall thick & fittings shall be fabricated from pipes confirming to IS 3589. Pipes shall be carefully laid to the alignment, levels and gradients and great care shall be taken to prevent any sand, earth or other matter from entering the pipes during laying. Pipes shall be kept thoroughly

clean during the course of laying. The ends of pipes shall be blocked with wooden plugs wedged home, at the end of each days work to prevent dirt and rodents, insects etc., entering the pipe.

Pipes up to 50mmdia, tapered screwed / Socket welded / Butt welded type jointing shall be adopted, while for pipes above 50mmdia welded or flanged connections shall be used. Flanged joints shall be made with 3 mm thick insertion rubber washer / Gaskets. All bolt holes in flanges shall be drilled & making hole by using gas cutting is not acceptable. The drilling of each flange shall be in accordance with relevant Standards.

Flanged joints shall be used for connections to vessel, equipment, flanged valves and also on suitable straight lengths of pipeline at strategic points to facilitate erection and subsequent maintenance work. The Bolts /Nuts / Washers used in the system shall be in accordance with relevant Standards.

- **4.9 Pipe Painting:** All pipes above ground shall be painted with 2 coats of epoxy primer and 2 coats of Synthetic Enamel paint od POST OFFICE RED shade
- **4.10 Butterfly Valves:** Butterfly valves shall be as per BS 5155 & provided for pipes 50mmdia and above on downstream (delivery side) of the pumps. The valves shall be CI construction, seat shall be black nitrile rubber with in situ molding. The valves shall be PN 1.2 rating.
- **4.11** Air Release Valves: Air release valve is 25mm screwed inlet GM single acting type and shall be fixed on all high points in the system (wet riser) with Ball valves or as shown on drawings.
- **4.12 Drain Valves:** Gun metal Gate / Ball valve of 15 / 25 / 40 / 50mmdia as per IS; 778 with fittings as required for instruments / draining any water in the system / Risers in low points.

## **LIST OF APPROVED MAKE**

SI. No. Item Description		Preferred Make		
1	Cable & Wires	: CCI/ RPG Asian/ Universal/Fort Gloster/ Nicco Torrent /Finolex/ Polycab/ Havells/RR		
2	Gate Valves	:KBL/H sarkar / Fluiod Control /Upadhya/ Kalpana/ (E.A.M)		
3	Pipes	: Tata / Jindal /SAIL / (E.A.M)		
4	Non- Return Valves	: KBL/ H sarkar / Fluiod Control /Upadhya/ Kalpana/ Venus/ Hawa/ InterValve / (E.A.M)		
5	Butterfly Valves	: KBL/H sarkar / Fluiod Control /Upadhya/ Kalpana/ Venus/ Hawa / (E.A.M)		
6	Pipe Fittings	: Bharat Forge/ Tube Products/M.S. Fittings/ Sanjay Forge/ VS Brand/ (E.A.M)		
7	Ball Valves, screwed end	: Leader/Zoloto/ITAP/ Hawa (E.A.M)		
8	Air Release Valve	: Leader/ Bajaj/ Hawa/ (E.A.M)		
9	Welding Electrodes	: ESAB/ ADVANI/Best Arc/ (E.A.M)		
10	Steel	: SAIL/RINL/TATA/JINDAL/ESSAR/BHUSAN		
11	Isolation Control Valve (ISI)	: Safe Spray/HD		
12	Sprinkler head (UL Listed)	: HD/Viking/Tyco		
13	Paint	: Berger/Asian Paints/Nerolac/ CDC Carboline/ Jenson & Nicholson/ Shalimar Paints/Bombay Paints		

Besides above mentioned make, equivalent approved make (EAM) may also be used. The Contractor shall also obtain prior approval from Owner for the 'Make' and 'Rating' of any other major item not mentioned above.

Engineering & Projects

# **TENDER DRAWING**

Engineering & Projects SBU-LI

# **List of Drawings**

Sl.No.	Title	Drawing No.	Revision	Date
1	LAYOUT OF AUTOMATIC	DRG.NO.	Rev. No. 0	03-08-2020
	SPRINKLER SYSTEM	EP/CWH/AMTZ/04	NEV. NO. U	



बामर लॉरी एण्ड कं. लिमिटेड

# Balmer Lawrie & Co. Ltd.

(A Government of India Enterprise)
Engineering & Projects
21, Netaji Subhas Road
Kolkata - 700 001

Supply, Installation, Testing & Commissioning of Automatic Fire Sprinkler System for Central Warehouse

at

AMTZ, VISAKHAPATNAM, ANDHRA PRADESH

Tender No. EP / AMTZ / CWH / FSS / 12

PRICED PART (PART-II)

### **NOTES:**

- 1.0 Details of the items under this Schedule shall be read in conjunction with the corresponding Specifications, Drawings and other Tender Documents.
- 2.0 The work shall be carried out as per approved drawings, Specifications and the description of the items in this Schedule and/or Engineer's instructions. Drawings enclosed with these documents are only for providing some preliminary of the work involved.
- 3.0 Items of work provided in this Schedule but not covered in the Specifications shall be executed strictly as per instructions of the Engineer-In-Charge.
- 4.0 Unless specifically mentioned otherwise in the Contract, the Tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, Constructional Plant, Temporary Work, labour, materials, levies, taxes, transport, layout, re-pairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, services, temporary roads, revenue expenses, contingencies, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the contract.
- 5.0 The Quantities of the various items mentioned in the Schedule of Items are approximate and may vary or may be deleted altogether. The Contractor, in his own interest, should get an indication of the probable extent of the work to be executed under any particular item in this Schedule before undertaking any preliminary and enabling work or purchasing bought out components related to the work.
- 6.0 Rates shall be quoted both in figures and in words in clear legible writing. No over writing is allowed. All scoring and cancellations should be countersigned by the Tenderer. In case of illegibility, the rates written in word will be considered final. All entries shall be in English language.
- 7.0 Engineer's decision shall be final and binding on the Contractor regarding clarification of items in this Schedule with respect to the other sections of the Contract.
- 8.0 For extra items, rates shall be derived from similar item rates included in the schedule of work. Where there is no such similar item available in the schedule, rate shall be analyzed as follows: Rate for extra item = Cost of material including transportation for delivery upto site (a) + cost of labour inclusive of all necessary tools, tackles, equipment, machinery and consumable (b) required to carry out the work + 15% of (a+b) towards profit and overhead + taxes, duties etc. as applicable.