



KERALA SHIPPING AND INLAND NAVIGATION  
CORPORATION LTD  
(A Government of Kerala Undertaking)  
63/3466, Udaya Nagar Road, Gandhi Nagar, Kochi -682020,  
Kerala, India  
Tel: 0484 2203614/2206232, Fax 2206848 [www.ksinc.in](http://www.ksinc.in)

**Tender for**  
**Repairs and Maintenance of Firefighting system**  
**at**  
**KSINC Head Office**

|                                |                            |
|--------------------------------|----------------------------|
| Tender No.                     | <b>CE-421/HO/FIRE/2019</b> |
| Cost of Tender documents       | Rs. 1380/- + 12% GST       |
| Last date of tender submission | 04.01.2021, 03.00 PM       |
| EMD                            | Rs. 17,250 /-              |
| Date of tender opening         | 04.01.2021, 03.30 PM       |



KERALA SHIPPING AND INLAND NAVIGATION  
CORPORATION LTD

*(A Government of Kerala Undertaking)*

63/3466, Udaya Nagar Road, Gandhi Nagar, Kochi -682020, Kerala, India  
Tel: 0484 2203614/2206232, Fax 2206848 www.ksinc.in

No. CE-421/HO/FIRE/2019

23/12/2020

**TENDER FOR REPAIRS AND MAINTENANCE OF  
FIREFIGHTING SYSTEM AT KSINC HEAD OFFICE.**

Sealed tenders are invited in single bid system, from reputed and experienced contractors / suppliers for the “**Repairs and Maintenance of Firefighting System at KSINC Head Office**”. Tender documents can be downloaded from the website of the Company, [www.ksinc.in](http://www.ksinc.in). The bidders have to pay the cost of tender documents, Rs. 1380/- +12% GST by DD in favor of KSINC Ltd., payable at Ernakulam, along with the duly signed tender document. Closing time and date for the submission of bid is 03.00 P.M on 04.01.2021.

**Sd/-  
Managing Director**



KERALA SHIPPING AND INLAND NAVIGATION  
CORPORATION LTD

*(A Government of Kerala Undertaking)*

63/3466, Udaya Nagar Road, Gandhi Nagar, Kochi -682020, Kerala, India  
Tel: 0484 2203614/2206232, Fax 2206848 www.ksinc.in

**GENERAL CONDITIONS OF TENDER**

- 1) Interested bidders are requested to download the tender document from the company website ([www.ksinc.in/tenders](http://www.ksinc.in/tenders)). The bidder shall remit tender fee of Rs.1,546/- by cash/DD at the cash counter of KSINC. The bidder shall also furnish EMD of RS. 17,250/- through Demand Draft drawn in favour of KSINC payable at Ernakulam at the along with the technical bid. The tender fee is non-refundable. EMD of the unsuccessful bidders will be returned after completing the bid process.
- 2) Duly filled and signed tender documents shall be submitted on or before 04.01.2021, 03.00 P.M at the following address super scribing the name of the work:  

**The Managing Director,  
Kerala Shipping and Inland Navigation Corporation Ltd  
63/3466, Udaya Nagar Road,  
Gandhi Nagar, Kochi – 682 020**
- 3) The bids received will be opened at 03.30 PM on 04.01.2021. The Managing Director KSINC Ltd reserves the right to reject any or all bids without assigning any reason.
- 4) **Eligibility Criteria**
  - (i) The bidder shall be registered company/firm with at least three years of experience in the installation/testing/commissioning of firefighting systems in high-rise buildings with number of storey not less than five.

(ii) The bidder shall have valid GST registration, ESI and PF registration and Permanent Account Number issued by Income Tax Department to participate in the tender.

**(iii)The bidder shall have executed one similar work, i.e. installation/testing/commissioning of firefighting systems in high-rise buildings with number of storey not less than five, within last three years.**

5) The bids shall be submitted under two bid system, Part I, the “Technical bid” containing all details about the bidder, work completion certificates of similar civil/marine works, details of machineries/equipment etc. and Part II - “Price Bid” in the same format as given in the Price Schedule attached here to.

6) Part-I Technical Bid

The Technical Bid shall be in the prescribed form. The details to be furnished under Part-I includes;

- a) Personal and contact details of the bidder and details of other key personnel.
- b) Details proving the eligibility and previous experience of the contractor along with Copy of work order and Satisfactory Work Completion Certificates from previous customers with certification obtained from the Fire and safety department.
- c) Registration details of the company/firm, details of valid licenses from Departments (If any).
- d) Details of GST registration, PAN No, ESI and PF registration etc.
- e) Details of Banker
- f) Other relevant details(If any)

7) The Price bid

(a)A Bill of Quantities (BOQ) is specifically prepared for this tender. The bidders shall submit their bids in the specified form only. Any additions, omissions or conditions there to be not acceptable. Any deviation from the given format will make the price bid invalid.

- (b)The bidders are required to fill their Name and Address and the rate they intent to quote in the BOQ.
- (c) The rates quoted shall be inclusive of all taxes, levies, cess, octroi or any other local, state or central taxes as applicable/ charged by local, state or Central Government. The company shall not allow any other payment or enhancement in rates for any reason.
- (d)The total value of the Price bid will be the only deciding criteria in the tender evaluation of this part.
- 8) Addendum/Corrigendum if any will be uploaded in the e-tender website of Government of Kerala.
- 9) The bidder shall sign all pages of the Tender document, Annexures, Attachments (If any) and Addendum/Corrigendum in acceptance of the Conditions of tender.
- 10) **Validity: The offers shall remain valid for a period of six months from the date of opening the bid.**
- 11) Signatory to the Offer: The Tender should be signed only by a duly authorized representative of the contractor / supplier, whose name and designation shall appear in Capital letters below the signature.
- 12)The Company is not bound to accept the lowest bid and may reject it without assigning any reasons. KSINC also reserves the right to reject any/all the tenders without assigning any reason thereof. KSINC also reserves the right to select the eligible bidder on the basis of the satisfaction of the managing authority.
- 13)The successful bidder, within seven days of receipt of the work order have to furnish a **security deposit cum performance guarantee equal to 10% of the value of the contract** in the form of DD payable at Kochi/Bank Guarantee.
- 14)The successful bidder shall execute agreement with the company in stamp paper worth Rs.200/- within 7 days of receipt of the work order.
- 15)The entire work shall be completed to the full satisfaction of the company within a period of 45 days or as indicated in the work order.

- 16) Details of the work schedule and the expected date of completion shall be submitted to the company within 3 days of receipt of work order.
- 17) The contractor shall use only quality materials for the work as per the schedule of items or after prior approval from Engineer-In-Charge (EIC).
- 18) If the works are not completed within the stipulated time, fine will be imposed at the rate of 0.5% of the contract value for each week of delay to a maximum of 10% of contract value.
- 19) The contractor shall either supervise the execution of the entire work himself or shall at his own expense an Engineer as his accredited agent approved by the Engineer In Charge.
- 20) KSINC shall not be responsible for any accident/theft or other damages occurred while the construction/execution/installation. The contractor/supplier must take adequate insurance to cover the risks. Contractor/supplier should also meet all the regulations and labour welfare measures such as ESI, PF etc. and necessary documents to be provided for verification.
- 21) The KSINC requires the Bidder/Suppliers/Contractors under this contract, observe the highest standard of ethics during the bidding process and execution of this contract. Any effort by the Bidder to influence the KSINC's bid evaluation, bid comparison or contract award decisions, may result in the rejection of this bid.
- 22) The contractor shall ensure that all workers engaged at site use safety items like safety shoe, safety helmets, safety belts coveralls etc. (no dothis allowed inside work site).
- 23) ID proof/PF/ESI details of all workers shall be submitted well in advance for allowing entry inside site and separate register to be maintained for the same.
- 24) The jurisdiction for all disputes arising out of this tender, subsequent work order, agreement or any other matter related thereto shall be the Courts in Ernakulam, irrespective of the location of the bidders.

- 25) If any of the bidders have any doubt / queries to be clarified, it shall be sent to the following email: [mech.ksinc@gmail.com](mailto:mech.ksinc@gmail.com), [ceksinc@gmail.com](mailto:ceksinc@gmail.com) or faxed to 0484-2206848. The decisions taken or clarifications issued will be posted in the website of the Company and will be applicable to all bidders.
- 26) The contractor shall execute the work continuously and good progress throughout the contract period. **The Contract is liable to be terminated**, if proportionate progress of the work is not achieved during the Contract period.
- 27) On completion of the work, the work site shall be cleaned up and no waste material to be dumped in yard space.
- 28) The defects liability period for the work executed will be one year from the date of completion of the work. The contractor is liable to be held responsible for any damage/nonfunctioning of the items/equipment/parts installed as part of this work. In such cases the contractor is responsible to carry out the repairs/replacement of the damaged/nonfunctioning items/equipment/parts at his own expense. No payment claims in this regard will be entertained by the company.
- 29) The contractor shall not cause any damage to KSINC buildings/properties/premises. If any such damage occurs, the contractor will be liable to restore/rectify the same at his own expense.
- 30) Bidders may inspect the site, with prior permission from KSINC, to perceive the present state of existing firefighting system.
- 31) No idle time charges will be paid to contractor in any account.
- 32) Payment shall be made based on the measurement of completed works and after obtaining a good and satisfactory completion certificate from Engineer in Charge.
- 33) The contractor shall be eligible for first stage payment if required, only after the arrival of all work materials at site. 50% of the material cost as per the purchase invoice may be released.
- 34) Final payment shall be made only after obtaining a good and satisfactory work completion certificate from the Engineer in Charge. Security deposit of 10.00% of

the total value of contract will be deducted from the final bill. The retained security deposit will be released only after the completion of defects liability period.

- 35) Strict discipline to be maintained during the tenure of the contract. Any misbehavior/Misuse of the owner's property or facilities shall be treated as an offence liable for termination of contract, legal proceedings or any other suitable measures at the discretion of the owner.





KERALA SHIPPING AND INLAND NAVIGATION  
CORPORATION LTD

*(A Government of Kerala Undertaking)*

63/3466, Udaya Nagar Road, Gandhi Nagar, Kochi -682020, Kerala, India  
Tel: 0484 2203614/2206232, Fax 2206848 www.ksinc.in

**SPECIAL CONDITIONS**

- I. The scope of the work includes Inspection/Repairs and Maintenance/Erection/Testing/Commissioning of the existing Firefighting system of KSINC Head Office at Gandhi Nagar and to obtain necessary clearance and certifications from Kerala Fire and Rescue department.
- II. All materials used in the works shall be of the best quality of their respective kinds and as specified herein, obtained from sources and suppliers approved by the Engineer-In-Charge (EIC) or his authorized representative and shall conform to the latest edition of KMBR/ NBC/Fire and Rescue orders/Indian Standards issued by the Bureau of Indian Standards.
- III. All materials used in the works shall be subjected to inspection and tests. Samples of all materials proposed to be employed in the permanent/temporary works shall be submitted to the EIC for approval before they are brought to the site. Samples required for approval and testing must be supplied in sufficient time to allow for testing and approval, due allowance being made for the fact that if the first samples are rejected, further samples may be required. Delay to the works arising from the late submission of samples will not be acceptable as a reason for delay in the completion of the works. Materials shall also be tested on the site and they may be rejected if found not suitable or not in accordance with the specifications. The contractor shall provide all assistance, instruments, machinery, labour and materials as are normally required for examining, measuring and testing any work.

- IV.** Before ordering any materials of any description for the works, the Contractor shall submit for the approval of the EIC, the names of the makers and suppliers proposed and any other detail required by the EIC.
- V.** All materials used in the works shall be stored on racks, supports, in bins, under cover, etc. as appropriate to prevent deterioration or damage from any cause whatsoever; without affecting day to day activities of the yard/office and to the entire satisfaction of the EIC or his representatives.
- VI.** Materials for the temporary works shall not be used for permanent works unless otherwise approved in writing by the EIC. Granting of such permission shall not prejudice the right of the EIC to reject materials so used, which have become unfit for use in the permanent works.
- VII.** Sampling of materials for approval and testing as called for under the appropriate Indian Standard or other relevant standard specification, and sampling and testing referred to in this specification, is to be done without charge and unless otherwise specified, the cost of all such tests and sampling shall be deemed to be included in the rates and prices quoted in the Bill of Quantities.
- VIII.** The Engineer-in-Charge or his representative shall be entitled at any time to inspect and examine any materials/plants intended to be used in or in the works. For this, purpose, the contractor shall afford such facilities as may be required for such inspection and examination
- IX.** A high standard of workmanship in all trades will be required. The Contractor shall ensure that only skilled and experienced tradesmen are employed.
- X.** The Contractor shall be responsible for supply, use and maintenance of all construction plant and equipment and he shall ensure that it is suitable for the work and is maintained in such a manner as to ensure its efficient working. The EIC may direct that plant, which is not efficient and is prejudicial to the quality of the work, be removed from the site and replaced by plant to his/her satisfaction. The plant and machinery deployed for the work shall not be removed from the site till completion of

work in all aspects and equipment shall not be taken out from site without approval of the EIC or his representative.

- XI.** The replaced items/equipment/parts shall be stacked at proper place as directed by the EIC. All such items will be the property of KSINC.
- XII.** The schedule of works were prepared based on the preliminary inspection only. The bidder/supplier shall provide solution for the requirement and include any missing item(s) notwithstanding the detailed schedule/specifications given in the tender document.
- XIII.** Wherever the servicing of item(s)/equipment/parts is not possible, the same shall be replaced with the new one exactly as per the class/grade/make of the existing item or as per the directions of EIC. Payments for such item will be done at 10% extra as actual on submitting original purchase bill.
- XIV.** The Contractor's supervisory staff shall be men fully experienced in the types of work being carried out under their supervision and capable of ensuring that it is done well and efficiently.
- XV.** Where required, the Contractor shall furnish details of his temporary works as may be called for by the EIC and the Contractor shall satisfy the EIC as to their safety and efficiency. The EIC may direct that temporary works which he considers unsafe or inefficient shall be removed and replaced in satisfactory manner.
- XVI.** All materials not herein fully specified and which may be offered for use in the works shall be subject to the approval of the EIC without which they shall not be used anywhere in the Permanent Works.
- XVII.** All the works shall be executed during day time only. None of the works shall be arranged on holidays without the prior approval in writing from EIC.

\*\*\*\*\*



KERALA SHIPPING AND INLAND NAVIGATION  
CORPORATION LTD

*(A Government of Kerala Undertaking)*

63/3466, Udaya Nagar Road, Gandhi Nagar, Kochi -682020, Kerala, India  
Tel: 0484 2203614/2206232, Fax 2206848 www.ksinc.in

**TECHNICAL SPECIFICATIONS**

**1. Scope of the work**

Scope of the work includes Inspection/Repairs and Maintenance/Erection/Testing/Commissioning of the existing Firefighting system of KSINC Head Office at Gandhi Nagar and to obtain necessary clearance and certifications from Kerala Fire and Rescue department. The contractor shall obtain all the necessary clearance certifications from the Fire and Rescue department.

- 2) Work under this scope shall consist of supply, installation, testing & commissioning of all labour, materials, equipment and appliances necessary for fire protection & fighting systems as described in this specification, schedule of quantities etc.
- 3) Work under this scope shall be carried out strictly in accordance with specifications attached and all relevant latest Indian standards, **National building code (NBC) – 2005:Part - IV**, prevailing guidelines and rules by Kerala Fire and Rescue department and any other statutory bodies.

**4) Specifications**

- I. Fire Pump - Overhauling of 5 HP fire pump. Parts to be renewed if necessary, Testing and commissioning after painting.
- II. Butterfly valve and non-return valve - Servicing of Butterfly valve and NRV 4"size.
- III. Air release valve - Servicing of Air Release Valve.
- IV. Ball valve - Servicing of Ball valve.

- V. Fire hydrant valve - Servicing of Hydrant Valve and Changing Neopherne Rubber Washer.
- VI. Hose Box - Servicing and Painting of Hose Box.
- VII. Fire Brigade inlet - Servicing and Painting of FBI -3 way.
- VIII. Fire Hose (Delivery Hose) - Servicing of Fire Hose 63mm with changing Neopherene Rubber Washer.
- IX. Pipe line painting - Painting of MS pipe 100mm size with one coat of red oxide primer and two coats of synthetic enamel paint of fire red colour.
- X. Fire Extinguisher - Supply, Installation, Testing and Commissioning of Fire Extinguisher dry chemical powder (ABC) Stored pressure type 4 kg capacity as per IS:15683 with ISI mark and with initial charger and installation brackets.
- XI. Branch Pipe - Supply, Installation, Testing and Commissioning of Branch Pipe- S.S 63 mm dia short size branch pipe with 20 mm dia bore nozzle , as per IS:903 with -ISI Marked. Make - Arihant/ winco/Kartar.
- XII. Hose Reel Drum - Supply, installation, testing and commissioning of Hose reel drum made of Mild Steel, Hose Reel Drum - as per IS:884 with 30 mtr length rubber hose of working pressure 7 kg/cm<sup>2</sup> and shutt off nozzle rang of jet flow 24 ltr/min, range of jet throw 6 mtrs with ISI mark. Make - Arihant/ winco /Kartar.
- XIII. Hose Box - Supply, Installation, Testing and Commissioning of Hose Box (cabinet) to accommodate one piece of 63 mm dia fire hose along with one pair of 63 mm dia male & female couplings and one branch pie. The cabinet is made of MS/Fibre sheet with glass fronted hinged doors and lock. Make-Fabricated.
- XIV. Pump Control Switch - Supply, Installation, Testing and Commissioning of fire pump(5 hp) control switch MCB type three pole 40 Amp - 440 Volt with encloser and necessary attachments ( including required cable terminations ).

- XV. Piping (Above Ground) -Supply, Installation, Testing and Commissioning of GI Pipe Class ' C' 100 mm dia Heavy grade with ISI Mark complete with all necessary fittings such as nuts & bolts, bends, flanges, tees etc. Piping shall have one coat of anticorrosive primer coat over which two coats of signal red paint. Make - Tata/Jindal.
- XVI. Piping (Under Ground) - Supply, Installation, Testing and Commissioning underground piping G I pipe Class 'C' 100 mm dia Heavy grade ISI mark complete with all necessary fittings such as nuts & bolts, bends, flanges, tees etc. and piping shall have anti corrosive wrapping and coating treatment. (The cost of excavation & backfilling if necessary will be vender scope) Make - Tata/Jindal.
- XVII. Manual Call Point - Supply, Installation, Testing and Commissioning of Manual Call Point break glass type red colour powder coated MS/ABS box fix on existing wall /frame,24/12 Volt DC operated push OFF/ON switching mechanism with inner, outer frame, operation label and necessary attachments. Make-AGNI/RAVEL.
- XVIII. Hooter - Supply, Installation, Testing and Commissioning of Audio alarm hooter ( sounder ) powder coated MS/ABS box fix on existing wall/frame, 24/12 Volt DC operated siren circuit with diaphram speaker, maxium sound 60 db intensity under statutory with necessary attachments. Make-AGNI/RAVEL.
- XIX. Fire Alarm Control Pannel - Supply, Installation, Testing and Commissioning of 6 zone Automatic Fire Alarm Control panel conventional type microprocessor based control made of MS sheet cabinet the powder coated, audio and digital visual display, circuit open short functions, test/evacuation mode, silence and reset options, common and zone wise hooter supply outputs, fault and fire mode auxiliary contacts with 24 DC volt output zone circuits, operating 230 / 50 Hz AC volts.
- 5) Pipe for firefighting shall conform to IS: 1239: 2004 (Heavy Grade) including all fittings like bends, elbows, tees, anchor fasteners, couplings etc., and shall be of reputed make. All pipes above ground and in exposed locations shall be painted

with one coat of red oxide primer and two coats of synthetic enamel paint of fire red colour. All pipes under floors or below ground shall be protected against soil corrosion by wrapping and coating material as per 10221: 1982. The pipes shall be adequately supported from ceiling or walls by structural clamps fabricated from M.S. structural e.g. rods, channels, angles and flats or by using anchor fasteners type as per details given in drawings/as per site conditions. All M.S. structural shall be painted with one coat of red oxide and two coats of Red Synthetic enamel paint.

- 6) Manual call point - The enclosure shall be completely dust, damp, weather and vermin proof with IP 65 protection. The complete unit shall be suitable for wall/column mounting with necessary surface/recess mounting accessories as required and shall be painted 'Signal Red' and the internal surface shall be painted with 'White' Color. Clear inscription reading (in English and Malayalam) "FIRE ALARM - IN CASE OF FIRE, BREAK GLASS" shall be provided for each manual call point unit, either on the enclosure or on a separate metal plate mounted behind the glass cover. Each manual call point unit shall be provided with the following accessories: - An iron hammer of sufficient weight, which could be used to break the glass cover. The iron hammer shall be suspended on a hook fixed to the enclosure by means of a non- corrodible iron chain of sufficient length and ply to facilitate easy breaking of the glass cover.
- 7) All the works shall be tested as specified under the relevant clauses of the respective codes for firefighting services. All materials and equipment found defective shall be replaced and whole work tested to meet the requirements of the specifications.
- 8) Contractor shall submit the manuals of all the items supplied to the Engineer in Charge at the time of delivery / installation & commissioning.



**KERALA SHIPPING AND INLAND NAVIGATION CORPORATION LTD**

*(A Government of Kerala Undertaking)*

61/1227, Udaya Nagar Road, Gandhi Nagar, Kochi -682020, Kerala, India

Tel: 0484 2203614/2206232, Fax 2206848 www.ksinc.in

**PART – I**

**TECHNICAL BID**

*(Details required as per tender conditions to be attached separately)*

|    |                                                                                                                       |                                                                                                            |
|----|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1  | Name of the bidder                                                                                                    |                                                                                                            |
| 2  | Address for Communication                                                                                             |                                                                                                            |
| 3. | Contact person and phone numbers                                                                                      |                                                                                                            |
| 4  | Constitution and registration numbers                                                                                 |                                                                                                            |
| 5  | PF Registration no.                                                                                                   |                                                                                                            |
| 6  | ESI registration No                                                                                                   |                                                                                                            |
| 7  | PAN No                                                                                                                |                                                                                                            |
| 8  | GST Registration no                                                                                                   |                                                                                                            |
| 9  | Details of previous experiences in installation /testing /commissioning of Firefighting system in high rise buildings | Use separate sheet. Attach copies of satisfactory work completion certificates issued by previous clients. |



|    |                                                       |                     |
|----|-------------------------------------------------------|---------------------|
|    | with number of storey not less than 5 in last 3 years |                     |
| 10 | List of key personnel                                 | Use separate sheet  |
| 11 | Other details if any                                  | Use separate sheets |
| 12 | Details of bankers                                    |                     |
| 13 | Details of EMD furnished                              |                     |

### **DECLARATION**

1. I/We hereby undertake that all the information furnished above is correct and true to the best of my knowledge.
2. I/we further undertake that the work **“Repairs and Maintenance of Firefighting system at KSINC Ltd Head Office, Gandhi Nagar”** shall be carried out as per the terms and conditions stated in the tender and at the rates specified in the price bid.

Place:

Signature:

Date:

Name:

Address:



KERALA SHIPPING AND INLAND NAVIGATION  
CORPORATION LTD

(A Government of Kerala Undertaking)

63/3466, Udaya Nagar Road, Gandhi Nagar, Kochi -682020, Kerala, India

Tel: 0484 2203614/2206232, Fax 2206848 www.ksinc.in

**TENDER FOR REPAIRS AND MAINTENANCE OF  
FIREFIGHTING SYSTEM AT KSINC HEAD OFFICE.**

**PART-II  
PRICE BID**

| Sl no. | Description of work/item                                                                                   | Quantity (Approximate) | Unit  | Rate | Amount |
|--------|------------------------------------------------------------------------------------------------------------|------------------------|-------|------|--------|
| 1      | <b>Fire Pump</b>                                                                                           |                        |       |      |        |
|        | Overhauling of 5 HP fire pump. Parts to be renewed if necessary, Testing and commissioning after painting. | One                    | EA    |      |        |
| 2      | <b>Butterfly Valve and Non return Valve (Check valve)</b>                                                  |                        |       |      |        |
|        | Servicing of Butterfly valve and NRV 4"size                                                                | Three                  | EA    |      |        |
| 3      | <b>Air Release Valve</b>                                                                                   |                        |       |      |        |
|        | Servicing of Air Release Valve                                                                             | One                    | EA    |      |        |
| 4      | <b>Ball valve</b>                                                                                          |                        |       |      |        |
|        | Servicing of Ball valve                                                                                    | Five                   | EA    |      |        |
| 5      | <b>Fire Hydrant Valve</b>                                                                                  |                        |       |      |        |
|        | Servicing of Hydrant Valve and Changing Neopherne Rubber Washer                                            | Seven                  | EA    |      |        |
| 6      | <b>Hose Box</b>                                                                                            |                        |       |      |        |
|        | Servicing and Painting of Hose Box                                                                         | Six                    | EA    |      |        |
| 7      | <b>Fire Brigade Inlet</b>                                                                                  |                        |       |      |        |
|        | Servicing and Painting of FBI - 3 way                                                                      | One                    | EA    |      |        |
| 8      | <b>Fire Hose (Delivery Hose)</b>                                                                           |                        |       |      |        |
|        | Servicing of Fire Hose 63mm with changing Neopherene Rubber Washer                                         | Seven                  | EA    |      |        |
| 9      | <b>Pipe Line painting</b>                                                                                  |                        |       |      |        |
|        | Painting of MS pipe 100mm size with one coat of red oxide primer and two coats of                          | 45.00                  | Metre |      |        |

|    |                                                                                                                                                                                                                                                                                                                       |       |    |  |  |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|--|--|
|    | synthetic enamel paint of fire red colour.                                                                                                                                                                                                                                                                            |       |    |  |  |
| 10 | <b>Fire Extinguisher</b>                                                                                                                                                                                                                                                                                              |       |    |  |  |
|    | Supply, Installation, Testing and Commissioning of Fire Extinguisher dry chemical powder (ABC) Stored pressure type 4 kg capacity as per IS:15683 with ISI mark and with initial charger and installation brackets.                                                                                                   | Seven | EA |  |  |
| 11 | <b>Branch Pipe</b>                                                                                                                                                                                                                                                                                                    |       |    |  |  |
|    | Supply, Installation, Testing and Commissioning of Branch Pipe- S.S 63 mm dia short size branch pipe with 20 mm dia bore nozzle , as per IS:903 with -ISI Marked. Make - Arihant/ winco/Kartar                                                                                                                        | Seven | EA |  |  |
| 12 | <b>Hose Reel drum</b>                                                                                                                                                                                                                                                                                                 |       |    |  |  |
|    | Supply, installation, testing and commissioning of Hose reel drum made of Mild Steel, Hose Reel Drum - as per IS:884 with 30 mtr length rubber hose of working pressure 7 kg/cm <sup>2</sup> and shutt off nozzle rang of jet flow 24 ltr/min, range of jet throw 6 mtrs with ISI mark. Make - Arihant/ winco /Kartar | Four  | EA |  |  |
| 13 | <b>Hose Box</b>                                                                                                                                                                                                                                                                                                       |       |    |  |  |
|    | Supply, Installation, Testing and Commissioning of Hose Box (cabinet) to accommodate one piece of 63 mm dia fire hose along with one pair of 63 mm dia male & female couplings and one branch pie. The cabinet is made of MS/Fibre sheet with glass fronted hinged doors and lock. Make- Fabricated                   | One   | EA |  |  |
| 14 | <b>Pump Control Switch</b>                                                                                                                                                                                                                                                                                            |       |    |  |  |
|    | Supply, Installation, Testing and Commissioning of fire pump(5 hp) control switch MCB type three pole 40 Amp - 440 Volt with encloser and necessary attachments ( including required cable                                                                                                                            | One   | EA |  |  |

|    |                                                                                                                                                                                                                                                                                                                                                                              |       |       |  |  |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|--|--|
|    | terminations )                                                                                                                                                                                                                                                                                                                                                               |       |       |  |  |
| 15 | <b>Above Ground Piping</b>                                                                                                                                                                                                                                                                                                                                                   |       |       |  |  |
|    | Supply, Installation, Testing and Commissioning of GI Pipe Class ' C' 100 mm dia Heavy grade with ISI Mark complete with all necessary fittings such as nuts & bolts, bends, flanges, tees etc. Piping shall have one coat of anticorrosive primer coat over which two coats of signal red paint. Make - Tata/Jindal                                                         | 40.00 | Metre |  |  |
| 16 | <b>Under Ground Piping</b>                                                                                                                                                                                                                                                                                                                                                   |       |       |  |  |
|    | Supply, Installation, Testing and Commissioning underground piping G I pipe Class 'C' 100 mm dia Heavy grade ISI mark complete with all necessary fittings such as nuts & bolts, bends, flanges, tees etc . and piping shall have anti corrosive wrapping and coating treatment. (The cost of excavation & backfilling if necessary will be vender scope) Make - Tata/Jindal | 12.00 | Metre |  |  |
| 17 | <b>Manual Call Point</b>                                                                                                                                                                                                                                                                                                                                                     |       |       |  |  |
|    | Supply, Installation, Testing and Commissioning of Manual Call Point break glass type red colour powder coated MS/ABS box fix on existing wall /frame,24/12 Volt DC operated push OFF/ON switching mechanism with inner, outer frame, operation label and necessary attachments. Make-AGNI/RAVEL                                                                             | Five  | EA    |  |  |
| 18 | <b>Hooter</b>                                                                                                                                                                                                                                                                                                                                                                |       |       |  |  |
|    | Supply, Installation, Testing and Commissioning of Audio alarm hooter ( sounder ) powder coated MS/ABS box fix on existing wall/frame, 24/12 Volt DC operated siren circuit with diaphram speaker, maxium sound 60 db intensity under statutory with necessary                                                                                                               | Five  | EA    |  |  |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |    |  |  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|--|--|
|    | attachments. Make-AGNI/RAVEL                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |    |  |  |
| 19 | <b>Fire Alarm Control Panel</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |    |  |  |
|    | Supply, Installation, Testing and Commissioning of 6 zone Automatic Fire Alarm Control panel conventional type microprocessor based control made of MS sheet cabinet the powder coated, audio and digital visual display, circuit open short functions, test/evacuation mode, silence and reset options, common and zone wise hooter supply outputs, fault and fire mode auxiliary contacts with 24 DC volt output zone circuits, operating 230 / 50 Hz AC volts. | One | EA |  |  |

**GRAND TOTAL: Rs. .... /-**

**In words: (Rupees.....)**

I / We ..... agree to Undertake to execute the Repairs and Maintenance of Firefighting system at KSINC Head Office, Gandhi Nagar for a total amount of Rs. ....

**SIGNATURE / NAME / ADDRESS OF CONTRACTOR**