AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

TENDER No: WRO/ CON/ 029-D/ 0219

Fire Protection Services for Teaching Hospital for the new Govt. Medical college at Baripada, Odisha

VOLUME - III

PRICE BID/BOQ
Tender for “Fire Protection Services for Teaching Hospital for the new Govt. Medical College at Balasore, Odisha”

**WRO/CON B-04/030-C**

### PRICE SCHEDULE

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>DESCRIPTION</th>
<th>ESTIMATED COST (Rs.)</th>
<th>TO BE QUOTED BY TENDERER</th>
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<td>% ( - ) Below / At Par/Above</td>
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<td>2</td>
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<td>4</td>
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<td>2</td>
<td>Fire Protection Services</td>
<td>57433608.69</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>57433608.69</strong></td>
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</tbody>
</table>

**Note:**

1. Rates to be quoted in this tender all inclusive with all taxes and duties etc. Excluding GST.

2. The bidder has to quote above/below percentage (%) Excluding GST However, the percentage (%) of GST applicable is to be shown separately for reference

**BIDDERS FINANCIAL OFFER:**

(In Figures)________________________________________________________________________________________________________________________________________________________

(In Words)________________________________________________________________________________________________________________________________________________________
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Item Description</th>
<th>Quantity</th>
<th>Units</th>
<th>Estimated Rate (excluding GST)</th>
<th>TOTAL AMOUNT (excluding GST)</th>
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<tbody>
<tr>
<td>239</td>
<td>FIRE FIGHTING WORK BUTTERFLY VALVE (MANUAL) with CI body SS disc nitrile sheet &amp; O-ring &amp; PN 16 pressure rating as specified.</td>
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<td>239.01</td>
<td>50 mm dia</td>
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<td>No.</td>
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<td>184700.00</td>
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<td>240</td>
<td>Y - STRAINER of Ductile CI Body flanged ends with stainless steel strainer for chilled / hot water circulation including insulation as specified.</td>
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<td>240.03</td>
<td>150 mm dia</td>
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<tr>
<td>241</td>
<td>Constructing masonry Chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with CI surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) &amp; i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design.</td>
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<td></td>
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<tr>
<td>241.01</td>
<td>With common burnt clay F.P.S.(non modular) bricks of class designation 7.5</td>
<td>2.00</td>
<td>No.</td>
<td>14701.00</td>
<td>29402.00</td>
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<tr>
<td>242</td>
<td>FIRE PUMP &amp; EQUIPMENT</td>
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<tr>
<td>242.01</td>
<td>Supply, installation, testing and commissioning of electrically driven high pressure centrifugal fire hydrant /sprinkler pump, suitable for automatic operation consisting of the following:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>242.02</td>
<td>a. Horizontal end suction centrifugal pump, suitable for operation on 415 volts ± 6%, 3 phase, 50 HZ A.C supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have CI casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and SS (304) Shaft with mechanical seal, capable for delivering 2850 LPM at outlet head of 88 mts to ensure a minimum pressure of 3.5 Kg/Sqcm at the farthest or topmost hydrant / sprinkler. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. The pump should be tested for bench mark at factory and shall be gotten approved by the Local fire Authority.</td>
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</tr>
<tr>
<td>242.03</td>
<td>Pump shall be capable of furnishing not less than 150% of rated capacity at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head.</td>
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<tr>
<td>242.04</td>
<td>b. Squirrel cage induction motor, TEFC type suitable for operation on 415 volts, 3 phase 50 HZ A.C supply, for the above pump with synchronous speed of 2900 RPM, conforming to IP 55 protection &amp; class F insulation. The motor shall conform to IS 325-1978 (up to date) with flexible coupling and coupling guard, complete as required.</td>
<td></td>
<td></td>
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<tr>
<td>242.05</td>
<td>c. Common base plate for (a) and (b) from M.S. Channel for required size.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>S</td>
<td>Description</td>
<td>Rate</td>
<td>Quantity</td>
<td>Amount</td>
<td></td>
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<tr>
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<td>------------------------------------------------------------------------------</td>
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<tr>
<td>242.06</td>
<td>d. Suitable cement concrete foundation with cement concrete plaster (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with anti-vibration arrangement of cushy foot mountings</td>
<td>0.00</td>
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<tr>
<td>242.07</td>
<td>e. The rate includes interconnecting cables, foundations &amp; foundation bolts</td>
<td>2.00</td>
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<td>261617.00</td>
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<tr>
<td>243</td>
<td>Supply of Diesel Engine driven fire pump suitable for automatic operation comprising of the following and conforming to BS 649/IS 10002 all amended upto date.</td>
<td>0.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>243.01</td>
<td>a. Horizontal end suction centrifugal pump, suitable for operation on 415 volts ± 6%, 3 phase, 50 Hz A.C supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have CI casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and SS (304) Shaft with mechanical seal, capable for delivering 2850 LPM at outlet head of 88 mts to ensure a minimum pressure of 3.5 Kg/Sqcm at the farthest or topmost hydrant / sprinkler. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. (The pump should be tested for bench mark at factory and shall be gotten approved by the Local fire Authority).</td>
<td>0.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>243.02</td>
<td>Pump shall be capable of furnishing not less than 150% of rated capacity at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head.</td>
<td>0.00</td>
<td></td>
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<tr>
<td>243.03</td>
<td>b. Heat exchanger cooled (secondary cooling) diesel engine of speed 1500 RPM suitable for the above pump with automatic starting mechanism and other accessories including fuel tank (fabricated from 3mm MS sheet, painted with two coats of synthetic enamel paint over a coat of primer) of capacity adequate to sustain pump operation for 8 hours continuous working. The tank shall be fitted with Magnetic oil level indicator, MH with cover, drain valve, air vent including structural supports (painted with approved shade), 1 No. x 12 volt battery, heat exchanger with necessary piping connections &amp; fittings, flexible coupling, coupling guard &amp; exhaust pipe connection complete as required.</td>
<td>0.00</td>
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<tr>
<td>243.04</td>
<td>c. Common base plate for (a) and (b) from M.S. channel of required size.</td>
<td>0.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>243.05</td>
<td>d. Suitable cement concrete foundation with plaster, (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with antivibration arrangement of cushy foot mountings.</td>
<td>0.00</td>
<td></td>
<td></td>
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<tr>
<td>243.06</td>
<td>e. The rate includes interconnecting cables, foundations &amp; foundation bolts</td>
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<td>427906.00</td>
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<td>244</td>
<td>Supply, installation, testing and commissioning of jockey pump (pressurisation pump) comprising of the following:</td>
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<tr>
<td>244.01</td>
<td>a. Vertical centrifugal pump, suitable for operation on 415 volts ± 6%, 3 phase, 50 Hz A.C supply. The installation shall be complete with Flexible coupling and coupling guard, complete as required.</td>
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<tr>
<td>244.02</td>
<td>The pump casing shall be CI, shaft shall be SS &amp; impeller / shaft sleeve / casing wearing ring shall be bronze. The pump shall be provided with mechanical seal The system shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. (The pump should meet the condition and shall be gotten approved by the Local fire Authority).</td>
<td>0.00</td>
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</tr>
<tr>
<td>244.03</td>
<td>b. Squirrel cage induction motor TEFC type for operation on 415 V, 3 phase 50 Hz AC supply for the above pump with a synchronous speed of 2900 RPM with flexible coupling and coupling guard etc. as required.</td>
<td>0.00</td>
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<tr>
<td>244.04</td>
<td>c. Common base plate for (a) and (b) from M.S. channel as required size.</td>
<td>0.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>244.05</td>
<td>d. Suitable cement concrete foundation with plaster, (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with Antivibration arrangement of cushy foot mounting.</td>
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<tr>
<td>244.06</td>
<td>For pump defined above &amp; of duty as follows :</td>
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<tr>
<td>244.07</td>
<td>Flow : 180 LPM</td>
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<tr>
<td>244.08</td>
<td>Head : 88 mts</td>
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<td>75373.00</td>
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<tr>
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<tr>
<td>245</td>
<td>Providing &amp; fixing MS Class ‘C’ diesel engine exhaust pipe (including all fittings, clamps, steel support) of suitable dia for the engine. The pipe shall be provided with 12 mm thick supercera ceramic fibre rope</td>
<td>20.00</td>
<td>RM</td>
<td>1592.00</td>
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<td>246</td>
<td>Providing, fixing, testing and commissioning of precharged air vessel (size 450 mm dia &amp; 2000 mm height) for pressurization of hydrant / sprinkler system complete with adequate pressure switches (as per design / requirement) with valves to operate as per operating sequences including 25 mm dia drain valve, air release valve with stop cock on the top, 25 mm dia inlet with isolating valve duly painted from inside and outside complete as required.</td>
<td>2.00</td>
<td>Set</td>
<td>34843.00</td>
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<tr>
<td>247</td>
<td>Note: Contractor shall include in his rates for providing level controllers, pressure switches, wiring, cabling from level controller / pressure switch to panel etc. complete as required to operate the system automatic/manual. Pump shall be protected against running dry.</td>
<td>0.00</td>
<td>No.</td>
<td>0.00</td>
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<tr>
<td>247.01</td>
<td>Providing &amp; fixing dial type (100 mm) pressure gauge with isolation ball valve suitable for working pressure of 250 PSI. Cost shall be inclusive of providing any short pieces, nipples, elbows etc. as required.</td>
<td>67.00</td>
<td>No.</td>
<td>784.00</td>
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<tr>
<td>248</td>
<td>Providing and fixing heavy class MS suction &amp; delivery headers of required length conforming to IS:3589 with welded joints standard MS Fittings and with end flange connections having inlet &amp; outlet flanged connections including MS supports from wall, floors &amp; ceiling complete as required. Cost should be inclusive of all supports / clamps / brackets, anchor fastener as required (all in GI). All hangers, clamps, brackets etc. shall be of MS duly painted with two coats of synthetic enamel paint with coat of zinc primer unless specified otherwise and then supply of the same shall also be included for rates under this head.</td>
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<td>248.01</td>
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<td>30.00</td>
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<td>249</td>
<td>Providing &amp; fixing heavy duty double flanged flexicon rubber expansion joint (suitable for system test pressure) of standard length as per manufacturers specs including rubber gaskets, flanges, nuts, bolts and washers complete as required.</td>
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<td>250</td>
<td>Providing and fixing of dual plate CI wafer type check valve (suitable for operating pressure of 16 kg / sqcm) with flanges, Nut, bolts &amp; washers, painting etc. complete as required.</td>
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<td>251</td>
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<td>251.01</td>
<td>Providing, fixing, testing &amp; commissioning of MS air cushion tank on top of riser fabricated from 6mm thick MS plate, 200 mm in diameter and 1.2 m in height with dished ends fabricated from 8mm thick MS plate with Air release valve with stop cock, flanged inlet connection and drain arrangement with 25mm dia valve, pressure gauge with gun metal stop cock complete with all accessories as required and conforming to IS 4736-1986.</td>
<td>10.00</td>
<td>Set</td>
<td>12394.00</td>
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<tr>
<td>251.02</td>
<td>Providing and fixing forged brass ball valve with forged brass ball suitable for test pressure of not less than 15 kg / sq.cm of the following size (Cost shall be inclusive of providing necessary union / flange connection)</td>
<td>0.00</td>
<td>No.</td>
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<tr>
<td>251.03</td>
<td>25 mm dia</td>
<td>58.00</td>
<td>No.</td>
<td>436.00</td>
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Signature of EPIL

Signature of Bidder
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Rate</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>252</td>
<td>Providing and fixing tamper switch on butterfly valve / sluice valve / isolation valve for remote mointing of the valve open / close position. The tamper switch shall be provided with potential free contact with 2 No. NONC. The valve shall also be provided with manual lock &amp; chain arrangement.</td>
<td>5.00</td>
<td>Set</td>
<td>11203.00</td>
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<tr>
<td>253</td>
<td>Providing &amp; fixing SS fire hydrant single landing valve with 80 NB flanged inlet, brass spindle controlled 63 mm dia female instantaneous outlet type. SS coupling, blank cap, chain, twist release type lug &amp; all accessories. Conforming to IS standard. Including fixing with anchor fastner and flanged tapping from wet riser and providing pressure gauge with SS ball valve complete as required.</td>
<td>69.00</td>
<td>No.</td>
<td>4611.00</td>
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<tr>
<td>254</td>
<td>Providing &amp; fixing swinging type Compact Type First Aid hose reel in red colour drum with Bursting pressure of Type II pipe of 42 bar with 36 mts. long and 20 mm dia heavy duty thermoplastic water hose, 20 mm dia globe valve stop cock, terminating with SS coupling &amp; nozzle of 6mm outlet with shut off valve confirming to IS 8090 - 1976 complete with MS socket for tap-off, drum and brackets (including painting) for fixing on wall with anchor fastner, bolts &amp; nuts complete as required.</td>
<td>58.00</td>
<td>No.</td>
<td>3776.00</td>
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<td>255</td>
<td>Providing &amp; fixing non-perlocating, rubber reinforced lined fire hose pipe (as per IS : 636, Type A) of 63 mm dia and length as described below. The hose shall be rated for brust pressure of 35.7 Kg/sqcm. Hose shall be complete with ISI marked brass male &amp; female coupling (IS:903) bound &amp; rivetted to hose pipe with copper rivets &amp; 1.5 mm copper wire.</td>
<td>0.00</td>
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<tr>
<td>255.01</td>
<td>15 m length</td>
<td>116.00</td>
<td>No.</td>
<td>4305.00</td>
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<tr>
<td>256</td>
<td>Providing &amp; fixing controlled percolation fire hose pipe (as per IS:8423) of 63 mm dia and 15 meter length rated for brust pressure of 35.7 Kg/sqcm. The hose shall be tested for flame resistance test in accordance to IS:8423. Hose shall be complete with ISI marked brass male &amp; female coupling (IS:903) bound &amp; rivetted to hose pipe with copper rivets &amp; 1.5 mm copper wire (Location : External fire hydrant)</td>
<td>22.00</td>
<td>No.</td>
<td>3946.00</td>
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<tr>
<td>257</td>
<td>Providing and Fixing SS 63 mm dia instantaneous pattern branch short pipe, 20 mm dia nozzle conforming to IS standard, suitable for inter connection to hose pipe coupling complete as required.</td>
<td>69.00</td>
<td>No.</td>
<td>1863.00</td>
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<tr>
<td>258</td>
<td>Providing and fixing standard firemans axe with heavy rubber handle.</td>
<td>58.00</td>
<td>No.</td>
<td>794.00</td>
</tr>
<tr>
<td>259</td>
<td>Providing and fixing 5 mm thick glass door (with M.S frame) of size 2.1 m x 1.2 m with center opening for fire hose cabinet. Suitably marked on the outside with the letters “FIRE HOSE” including looking arrangement. All MS work to be in Red PO colour over appropriate primer. The above item is only for masonry fire station.</td>
<td>58.00</td>
<td>No.</td>
<td>3708.00</td>
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<tr>
<td>260</td>
<td>Providing and fixing heavy duty SS Floor grating with frame of approved design including setting in floor with cement motor to match with floor finish as per architect requirement. (for FHC drain pipe)</td>
<td>0.00</td>
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<td></td>
</tr>
<tr>
<td>260.01</td>
<td>Size 100 mm x 100 mm</td>
<td>58.00</td>
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<tr>
<td>261</td>
<td>Providing and fixing weather proof lockable cabinet of size not less than 0.9 x 0.6 x 0.45 mtr made out of MS sheet of 20 gauge thickness having central opening and 4 mm thick glazed glass doors (Two No.) suitably marked on the outside with the letters “FIRE HOSE” including necessary locking arrangement and shall be painted with powder coating and two coats of synthetic enamel paint of approved shade.</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>261.01</td>
<td>The cabinet shall be suitable to accommodate 2 No.or 4 No 15mtr long Hose pipe &amp; 2 No branch pipe nozzle. It shall be mounted on raised Brick platform complete as required. (Cost shall be inclusive of providing break glass box containing key for the cabinet along with hammer).</td>
<td>11.00</td>
<td>No.</td>
<td>3887.00</td>
</tr>
<tr>
<td>261.02</td>
<td>Providing &amp; fixing GM fire brigade suction hose coupling (draw-out connection) with nut for female coupling as per IS: 902-1974 complete with 100 mm dia GI suction pipe and 100 mm dia foot valve (to be connected to static tank). Provision of GI drop pipe and foot valve shall be made in all the fire water static storage tanks (2 No) (GI pipe to be paid separately through appropriate item while cost of foot valve to be included).</td>
<td>1.00</td>
<td>No.</td>
<td>12032.00</td>
</tr>
</tbody>
</table>

Signature of Bidder
<table>
<thead>
<tr>
<th></th>
<th>SPRINKLER, PIPING &amp; ACCESSORIES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>261.03</td>
<td>Providing &amp; fixing GM fire brigade connection (suction collecting head) consisting of 4 No. 63 mm dia instantaneous type male couplings with built-in check valves, 1 No. 150 mm dia sluice valve, 1 No. 150 mm dia non-return valve and 150 mm dia flanged outlet complete with bolts, nuts and rubber insertions as required and as per IS:904-1963.</td>
<td>1.00</td>
<td>No.</td>
</tr>
<tr>
<td>261.04</td>
<td>Providing &amp; fixing MS cabinet (to enclose above FB connection and draw out connection) fabricated from 16g MS sheet with full front glass door and locking arrangement duly painted with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade and suitably mounted on a raised masonry platform as required (Approx 0.6m x 0.6m x 0.45m)</td>
<td>2.00</td>
<td>No.</td>
</tr>
<tr>
<td>262</td>
<td>Providing, laying, jointing and testing in trenches the following sizes of MS class 'C' (heavy class) pipes conforming to IS:1239 with accessories like fittings including tees, elbows, reducers, flanges, rubber gaskets, G.I. nuts, bolts and washers including excavation in all kind of soil, refilling, ramming, shoring, removing the excavated surplus material, providing adequate support to the pipe and making good the same complete as required. Rate shall include for dewatering necessary to execute the work. The pipe shall not be less than 1.0 m below ground level at any point.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>263</td>
<td>Providing protection to embedded MS pipes and fittings by applying protective primer (@ 100 gm/sqm) thereafter wrapping 4 mm thick protection coating by thermo fusion process. Overlap shall be maintained at 15 mm. The application process shall be strictly according to manufacturer’s specification.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>263.01</td>
<td>80 mm dia</td>
<td>25.00</td>
<td>RM</td>
</tr>
<tr>
<td>263.02</td>
<td>100 mm dia</td>
<td>9.00</td>
<td>RM</td>
</tr>
<tr>
<td>263.03</td>
<td>150 mm dia</td>
<td>815.00</td>
<td>RM</td>
</tr>
<tr>
<td>264</td>
<td>SPRINKLER, PIPING &amp; ACCESSORIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>264.01</td>
<td>Providing, fixing, testing &amp; commissioning of Air Release Valve on top of each Hydrant riser of 15mm dia with full size NPT inlet and outlet connections with stop cock and drain arrangement, pressure gauge with gun metal stop cock complete with all accessories as required.</td>
<td>5.00</td>
<td>Set</td>
</tr>
<tr>
<td>265</td>
<td>Providing, laying, jointing and testing of following sizes of pipes conforming to IS-1239 with all accessories like all fittings (for pipes upto 50mm dia thread forged steel fittings and for pipes above 50 mm dia MS fitting with welded joint shall be used) including tees, elbows, reducers, union, flanges, rubber gaskets, G.I. nuts, bolts, washer including supporting/fixing the pipe on floor/wall/ceiling with clamps, hangers (using anchor fasteners) as per specification and all as per Project Manager’s requirements including cutting holes and in brickwork and making good the same to original conditions complete in all respects.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>265.01</td>
<td>All hangers, clamps, brackets etc. shall be of galvanized iron unless specified otherwise and then supply of the same shall also be included for rates under this head. Welding of any kind on the galvanized support / hanger shall not be permitted.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>265.02</td>
<td>Providing two coats of synthetic enamel paint of approved shade over a coat of primer. Prior to application of primer the surface should be cleaned for any dirt, rusts, rough substance etc. Including painting of legends both direction arrow as per the approval of the Project Manager.</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>265.03</td>
<td>For Sprinkler system - MS 'C' Heavy class pipe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>265.04</td>
<td>25 mm dia</td>
<td>13400.00</td>
<td>RM</td>
</tr>
<tr>
<td>265.05</td>
<td>32 mm dia</td>
<td>410.00</td>
<td>RM</td>
</tr>
<tr>
<td>265.06</td>
<td>40 mm dia</td>
<td>1610.00</td>
<td>RM</td>
</tr>
<tr>
<td>265.07</td>
<td>50 mm dia</td>
<td>1845.00</td>
<td>RM</td>
</tr>
<tr>
<td>265.08</td>
<td>65 mm dia</td>
<td>1375.00</td>
<td>RM</td>
</tr>
<tr>
<td>265.09</td>
<td>80 mm dia</td>
<td>555.00</td>
<td>RM</td>
</tr>
</tbody>
</table>
265.1 100 mm dia | 915.00 RM | 1159.00 | 1060485.00
265.11 150 mm dia | 1660.00 RM | 1591.00 | 2641060.00
266 Providing, fixing, jointing and testing in position the for drainage purpose following heavy class (Class B) M.S pipes conforming to IS:1239 cut to required lengths including two coats of synthetic enamel paint of approved shade over a coat of primer and all necessary fittings (All fittings shall conform to IS:1879 (part 1 to 10) and specials such as bends, tees, unions, Reducers, flanges & plugs etc. fixing at wall /ceiling level supported by clamps, hangers (using anchor fastners) etc, as per specification and all as per Project Manager's / Consultant requirement. All hangers, clamps, brackets etc. shall be of galvanized iron unless specified otherwise and the supply of the same shall also be included in rates under this head. | 0.00
266.01 80 mm dia | 235.00 RM | 764.00 | 179540.00
267 Supply, installation, testing and commissioning of electrically operated water flow switches (Vane type) including tamper switch and accessories, complete with tap off socket arrangement as required, with potential free contact with 2 No. NONC. | 0.00
267.01 100 mm dia | 8.00 No. | 3749.00 | 29992.00
267.02 150 mm dia | 16.00 No. | 3749.00 | 59984.00
268 Providing & fixing brass quartzoid sprinklers (UL approved) of 15 mm dia size, suitable for sustaining the pressure on the seat & water hammer effect. The type & temperature rating shall be as follows : | 0.00
268.01 Spray recessed (adjustable) rosette (68°C) sprinkler quick response pendant type. | 3574.00 No. | 588.00 | 2101512.00
268.02 Spray recessed (adjustable) rosette (68°C) sprinkler quick response upright type. | 1284.00 No. | 588.00 | 754992.00
268.03 Sidewell extended coverage (68°C) sprinkler quick response type. | 60.00 No. | 622.00 | 37320.00
269 Providing, fixing, testing & commissioning of U.L.listed/ FM approved corrugated SS-304 Braided flexible sprinkler pipe droplet for 12 kg/ sq. cm. working pressure with 1/2" BSP threaded outlet & 1" BSP threaded inlet with reducer nipple, snap, clamp, T-bar bracket etc. with necessary fitting complete as required. | 0.00
269.01 1000 mm length | 2912.00 No. | 1084.00 | 315668.00
269.02 1200 mm length | 1943.00 No. | 1137.00 | 220919.00
270 Providing & Fixing of Installation Control Valve with turbine type automatic Alarm Gong to be connected with control valve, drain & test valve and all other necessary components as per manufacturer's specifications complete as required. | 0.00
270.01 150 mm dia | 1.00 No. | 29828.00 | 29828.00
271 Providing and fixing inspectors test assembly complete with test valve, sight glass sectional drain valve, 25mm and 50mm dia medium class (Class B) G.I. pipes conforming to IS:1239 cut to required lengths including threaded fittings,union with corrosion resistant orifice all complete strictly as per drawing. | 4.00
271.01 1000 mm length | 24.00 No. | 5265.00 | 126360.00
272 PORTABLE CHMICAL FIRE EXTINGUISHERS | 0.00
272.01 Supply, installation, testing and commissioning of following types of extinguisher with provision of wall bracket (fixed with anchor fastner). | 0.00
272.02 Supply, Installation, Fixing of CO2 type Fire Extinguisher of capacity 4.5 kg (6.8 Liter) conforms to IS 15683, bearing ISI mark, consisting of High Pressure seamless steel cylinder (IS 7285) and duly approved by Chief controller of Explosive Nagpur, fitted with wheel type valve, fully charged with CO2 gas (IS 12222), with non-conductor of electricity discharge PVC horn along with Bend Pipe, Internally siphon tube & mounting brackets having fire rating. | 53.00 Each | 5518.00
273 Supply, Installation, Fixing of Stored Pressure (ABC Dry Chemical Powder) type Fire Extinguisher of Capacity 6 kg Confirms to IS 15683, bearing ISI mark complete with brass forged squeeze grip type valve fitted with pressure gauge, pressurize with dry Nitrogen gas filled, with discharge nozzle with wall mounting bracket, having fire rating. | 0.00
273.01 6 Kg | 53.00 Each | 2483.00 | 131599.00

Signature of EPIL 7 Signature of Bidder
<table>
<thead>
<tr>
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<th>Item Description</th>
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<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>273.02</td>
<td>10 Kg Mechanical Foam type Fire Extinguisher. In HP Mild Steel Cylinders ISI marked TAC approved fitted with pressure indicating gauge, internal tube, squeeze lever type valve fully charged complete in all respects including wall suspension bracket / trolley mounted and conforming to IS:910</td>
<td>8.00</td>
<td>No.</td>
<td>3143.00</td>
</tr>
<tr>
<td>274</td>
<td>Supplying and installing at approved location approved make fire buckets of 24 gauge galvanized steel sheet, standard 9 litre capacity and of round bottom shape, painted white inside and red outside and black on the bottom, inscribed with letters “FIRE” in black and gold. Cost shall be inclusive of providing MS stand duly painted over a coat of primer</td>
<td>50 Litres (trolley mounted)</td>
<td>5.00</td>
<td>No.</td>
</tr>
<tr>
<td>275</td>
<td>Supply installation testing and commissioning of Wet Chemical Based Kitchen Hood Suppression System comprising filled Cylinder and valve assembly with minimum 9 litre capacity including cylinder bracket, gasket, tube, nickel plated tube fittings such as tees, elbows, cross tees, union etc., stainless steel tube and fittings, nozzles, manual release device, pressure switch, wet chemical agent and other accessories as per specifications and required for the system as per Project Manager requirements. The whole system shall be LPCB approved including the wet chemical agent.</td>
<td>15.00</td>
<td>No.</td>
<td>608.00</td>
</tr>
<tr>
<td>276</td>
<td>Supply, Testing &amp; Commissioning, fixing of Network Repeater Panel with 6 inch or 640 characters LCD Panel ; The LCD shall Display all events / detectors, devices status of complete systems in the networked. The NRP shall be equipped with QWERTY Keypad. Mounting options include an annunciator box, and blank modules are required for mounting.</td>
<td>2.00</td>
<td>Set</td>
<td>142753.00</td>
</tr>
<tr>
<td>277</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable Multicriteria detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>40.70</td>
<td>No.</td>
<td>3599.00</td>
</tr>
<tr>
<td>278</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable Photo electric smoke detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>1898.60</td>
<td>No.</td>
<td>3390.00</td>
</tr>
<tr>
<td>279</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable rate of rise Heat detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>30.80</td>
<td>No.</td>
<td>3260.00</td>
</tr>
<tr>
<td>280</td>
<td>Supply, Testing &amp; Commissioning, fixing of Fault Isolators for isolating shorted, rewired and loose circuits between two successive fault isolators with automatic resetting arrangement complete as required.</td>
<td>125.00</td>
<td>No.</td>
<td>2383.00</td>
</tr>
<tr>
<td>281</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable relay control modules etc complete as required as per specifications.</td>
<td>179.30</td>
<td>No.</td>
<td>3651.00</td>
</tr>
</tbody>
</table>

**FIRE ALARM SYSTEM**

Supply, installation, testing and commissioning of 8 Loop Microprocessor based intelligent analogue addressable, modular, expandable networkable, following loop (each loop consist of minimum 125detector & 125devices) fire alarm control panel with minimum 640 character LCD display, multiple access levels, event history file in non-volatile memory (EEPROM). The panel shall support programmable relay for controlling lifts, staircase pressurizations fans, lift shaft & lift lobby pressurization fans, toilets exhaust fans, ventilation fans, monitoring of fire sprinkler and fire hydrant pump controlled by powerful Boolean logic equation. The panel shall have minimum five independent hazard release circuit built-in the panel the panel shall have in built facility for voice evacuation system and two way communication and also interface with Public Addressing system. The panel shall have 240 volts AC power supply, automatic battery charger, 24 volts, sealed lead acid maintenance free batteries sufficient for 24 hours normal working and then be capable of operating the system for 4 hours during emergency condition. The panel shall be UL/EN listed. Tenderer to provide interfacing connectivity (BAC Net/modbus gateway) in Fire Panel for integrating with building management system complete as per specification.

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
<th>Rate</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>282</td>
<td>Supply, Testing &amp; Commissioning, fixing of Network Repeater Panel with 6 inch or 640 characters LCD Panel ; The LCD shall Display all events / detectors, devices status of complete systems in the networked. The NRP shall be equipped with QWERTY Keypad. Mounting options include an annunciator box, and blank modules are required for mounting.</td>
<td>2.00</td>
<td>Set</td>
<td>285506.00</td>
</tr>
<tr>
<td>283</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable Multicriteria detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>40.70</td>
<td>No.</td>
<td>3599.00</td>
</tr>
<tr>
<td>284</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable Photo electric smoke detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>1898.60</td>
<td>No.</td>
<td>3390.00</td>
</tr>
<tr>
<td>285</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable rate of rise Heat detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>30.80</td>
<td>No.</td>
<td>3260.00</td>
</tr>
<tr>
<td>286</td>
<td>Supply, Testing &amp; Commissioning, fixing of Fault Isolators for isolating shorted, rewired and loose circuits between two successive fault isolators with automatic resetting arrangement complete as required.</td>
<td>125.00</td>
<td>No.</td>
<td>2383.00</td>
</tr>
<tr>
<td>287</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable relay control modules etc complete as required as per specifications.</td>
<td>179.30</td>
<td>No.</td>
<td>3651.00</td>
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</table>

**ADDITIONAL COSTS**

<table>
<thead>
<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>288</td>
<td>Supply, Testing &amp; Commissioning, fixing of Network Repeater Panel with 6 inch or 640 characters LCD Panel ; The LCD shall Display all events / detectors, devices status of complete systems in the networked. The NRP shall be equipped with QWERTY Keypad. Mounting options include an annunciator box, and blank modules are required for mounting.</td>
<td>2.00</td>
<td>Set</td>
<td>285506.00</td>
</tr>
<tr>
<td>289</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable Multicriteria detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>40.70</td>
<td>No.</td>
<td>3599.00</td>
</tr>
<tr>
<td>290</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable Photo electric smoke detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>1898.60</td>
<td>No.</td>
<td>3390.00</td>
</tr>
<tr>
<td>291</td>
<td>Supply, Testing &amp; Commissioning, fixing of Analog addressable rate of rise Heat detector with mounting based LED, address switch to programme the detectors complete as required.</td>
<td>30.80</td>
<td>No.</td>
<td>3260.00</td>
</tr>
<tr>
<td>292</td>
<td>Supply, Testing &amp; Commissioning, fixing of Fault Isolators for isolating shorted, rewired and loose circuits between two successive fault isolators with automatic resetting arrangement complete as required.</td>
<td>125.00</td>
<td>No.</td>
<td>2383.00</td>
</tr>
<tr>
<td>293</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable relay control modules etc complete as required as per specifications.</td>
<td>179.30</td>
<td>No.</td>
<td>3651.00</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity/Unit</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>814</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable monitor modules for Sprinkler Flow Switch, Fire doors, magnetic contacts complete as required as per specifications.</td>
<td>40.70</td>
<td>No.</td>
<td>3338.00</td>
</tr>
<tr>
<td>815</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable Glass Break type Manual Call Points as required as per specifications.</td>
<td>108.90</td>
<td>No.</td>
<td>3390.00</td>
</tr>
<tr>
<td>816</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable Hooter with Strobe lights with 110 cd. Strobes shall be synchronised for better evacuation as per specification complete as required.</td>
<td>72.60</td>
<td>No.</td>
<td>5059.00</td>
</tr>
<tr>
<td>817</td>
<td>Supply, Testing &amp; Commissioning, fixing of Addressable Glass Break type Manual Call Points as required as per specifications.</td>
<td>800.00</td>
<td>No.</td>
<td>339.00</td>
</tr>
<tr>
<td>818</td>
<td>Supply, Testing &amp; Commissioning, fixing of Fire fighting telephone Jack as approved by consultant/Architect.</td>
<td>64.00</td>
<td>No.</td>
<td>365.00</td>
</tr>
<tr>
<td>819</td>
<td>Supplying and drawing 2 x 2.5 sq. mm copper sqmm of fire servicable cable as required.</td>
<td>463.10</td>
<td>No.</td>
<td>678.00</td>
</tr>
<tr>
<td>820</td>
<td>Supply, installation, testing and commissioning of False Ceiling Speakers of 6 W RMS power with multitaps, handling capacity, inbuilt 100 V Line Matching Transformer, Wide Opening angle, Optimized for music and speech applications, complete with mounting clamps.</td>
<td>4.00</td>
<td>No.</td>
<td>678.00</td>
</tr>
<tr>
<td>821</td>
<td>Supply, installation, testing and commissioning of Surface Ceiling / Wall Mounted Speakers of 6 W RMS power with multitaps, handling capacity, inbuilt 100 V Line Matching Transformer, Wide Opening angle, Optimized for music and speech applications, complete with mounting clamps.</td>
<td>6.00</td>
<td>No.</td>
<td>2034.00</td>
</tr>
<tr>
<td>822</td>
<td>Supply, installation, testing and commissioning of Wall Mounted Cabinet Speakers of 15 W RMS power, with multitaps, handling capacity, inbuilt 100 V Line Matching Transformer, Internal Tappings, Trapezoidal Compact Design, Optimized for speech and music applications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>823</td>
<td>Supply, installation, testing and commissioning of Wall Mounted Cabinet Speakers of 15 W RMS power, with multitaps, handling capacity, inbuilt 100 V Line Matching Transformer, Internal Tappings, Trapezoidal Compact Design, Optimized for speech and music applications</td>
<td>12.00</td>
<td>No.</td>
<td>46941.00</td>
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<tr>
<td>824</td>
<td>Supply, installation, testing and commissioning of (BOSCH /ATIES) of rack mounted dual Channel Digital Power Amplifier capable of delivering 300 W RMS power output or 480 W RMS burst output; complete with 100 V Line Matching Transformer, built-in fan for temperature control, Distortion typically 0.03% @ 1 KHz, Hum and Noise 90 dB below rated output selection facility.provision for hookup with Fire Alarm Panel, complete with connections and required circuitry</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>825</td>
<td>Supply, installation, testing and commissioning of followings with communication cable and accessories as required for system. Voice Controller as required for system interface with FAS,EPBAX and LIFT system. suitable Zone selector with micro phone including keypad as required for system. Router as required for system. System compressive of above as required</td>
<td>1.00</td>
<td>Lot</td>
<td>230168.00</td>
</tr>
<tr>
<td>826</td>
<td>Supply, installation, testing and commissioning of Digital micro phone with zone key for remote location and interface with controller including communication cable and all accessories.</td>
<td>6.00</td>
<td>No.</td>
<td>13039.00</td>
</tr>
<tr>
<td>827</td>
<td>Supply, installation, testing and commissioning of 19&quot; equipment rack made out of 2 mm thick CRCA sheet duly powder coated; in-built amplifier mounting; amplifier, controller, suitable for housing of above control equipment.</td>
<td>42.00</td>
<td>No.</td>
<td>31816.00</td>
</tr>
<tr>
<td>828</td>
<td>Supply, laying and connecting of single pair PVC insulated FRLS twisted shielded copper conductor cable of 32/0.2 mm dia in existing conduit including all fixing accessories as required.</td>
<td>6483.40</td>
<td>RM</td>
<td>81.00</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Quantity</td>
<td>Rate</td>
<td>Amount</td>
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<tr>
<td>829</td>
<td>CCTV (IP VIDEO SURVEILLANCE) SYSTEM Supplier, installation, testing and commissioning of 3 MP PTZ Camera, ONVIF profile S, G and Q, UL, CE, FCC Certified, 30 X Optical Zoom, Focal length 4.3mm to 129 mm, 12 X digital zoom, Quad stream, H.265, H.264 video compression support, frame rate 25 FPS @ 3MP, 50 FPS @ 2 MP, 2 streams simultaneously at 1920 x 1080 p, Shutter Speed : 1/1 - 1/10000 sec, 360° endless Pan, -20° - 200° tilt, Pan Manual Speed : 0.1° - 300°/s, Tilt Manual Speed : 0.1° - 200°/s, 256 presets, 120 dB WDR, Edge analytics : Abandoned Object, Intrusion Detection, Tampering, Wrong Direction, Loitering Detection, Object Counting, Stopped Vehicle, Object Removal, Inbuilt IR LED, IR Distance upto 200 mtrs, IP 66. (Approved make - Axis / Impulse / Avigilon/ Mobotix/ Algovision)</td>
<td>11.00</td>
<td>No</td>
<td>81430.00</td>
</tr>
<tr>
<td>830</td>
<td>Supply, installation, testing and commissioning of 3 MP bullet camera, ONVIF profile S &amp; G, UL, CE, FCC Certified, 1/2.8° Progressive Scan CMOS, 2.8 mm to 12 mm motorized varifocal lens, triple stream, min illumination : 0.05 Lux @ (F1.2, AGC ON), 0 Lux with IR, Auto switch IR cut filter, SD card support, 1 input / 1 output audio support, Shutter Speed : 1/5, 1/100,000 s, DWDR, Video Compression : H.265, H.264, frame rate : 30 fps @ 3MP, Edge analytics : line crossing, perimeter intrusion, Face detection, cross counting, stationary object, In built IR LED, IR Distance upto 40 meters, IP 66, POE. (Approved make - Axis / Impulse / Avigilon/ Mobotix/ Algovision)</td>
<td>13.20</td>
<td>No</td>
<td>18158.00</td>
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<td>831</td>
<td>Supply, Installation, Testing &amp; Commissioning of 3 MP Dome Camera, ONVIF profile S &amp; G, UL, CE, FCC Certified, 1/2.8° CMOS sensor, 2.8 mm to 12 mm motorized varifocal lens, triple stream, Min Illumination : 0.05 Lux @ (F1.2, AGC ON), 0 Lux with IR, Shutter Speed : 1/5, 1/100,000 s, auto switch IR cut filter, Video Compression : H.265, H.264, frame rate : 30 fps @ 3MP, Edge analytics : line crossing, perimeter intrusion, Face detection, cross counting, stationary object, In built IR LED, IR Distance upto 30 mtrs, IP 66, POE. (Approved make - Axis / Impulse / Avigilon/ Mobotix/ Algovision)</td>
<td>280.50</td>
<td>No</td>
<td>14468.00</td>
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<tr>
<td>832</td>
<td>Supply, Installation, Testing &amp; Commissioning of 3 MP Dome Camera, ONVIF profile S &amp; G, UL, CE, FCC Certified, 1/2.8° CMOS sensor, 2.8 mm to 12 mm motorized varifocal lens, triple stream, Min Illumination : 0.05 Lux @ (F1.2, AGC ON), 0 Lux with IR, Shutter Speed : 1/5, 1/100,000 s, auto switch IR cut filter, Video Compression : H.265, H.264, frame rate : 30 fps @ 3MP, Edge analytics : line crossing, perimeter intrusion, Face detection, cross counting, stationary object, In built IR LED, IR Distance upto 30 mtrs, IP 66, POE. (Approved make - Axis / Impulse / Avigilon/ Mobotix/ Algovision)</td>
<td>44.00</td>
<td>No</td>
<td>17116.00</td>
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<td>833</td>
<td>Supply, installation and commissioning of ONVIF profile S &amp; G, UL certified 32 Channel NVR, 4 SATA ports, each SATA capacity support of upto 8 TB, Recording Bandwidth 320 Mbps, 1 X HDMI, 1 X VGA, Alarm : 16ch in / 1ch out, 1 X RJ45 port, 1x3.0 USB for backup / upgrade, 2x 2.0 USB for mouse, Alarm on video loss, Smart Phone support : iOS, Android with 30 days recording storage. (Approved make - Axis / Impulse / Avigilon/ Mobotix/ Algovision)</td>
<td>12.00</td>
<td>No</td>
<td>78400.00</td>
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<td>834</td>
<td>Supply, installation, testing and commissioning of 56° totally flat colour LCD monitor as per Specification with connectivity complete as required.</td>
<td>10.00</td>
<td>No</td>
<td>49781.00</td>
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<td>835</td>
<td>Supply, installation, testing and commissioning of Joy stick as per Specification with connectivity complete as required.</td>
<td>1.00</td>
<td>No</td>
<td>1687.00</td>
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<tr>
<td>836</td>
<td>Supply, installation, testing and commissioning of User Client control software (web based) complete as per spec with valid licenses. The software should enable the user to view multiple cameras in any combination available on the network.</td>
<td>5.00</td>
<td>Set</td>
<td>63248.00</td>
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<tr>
<td></td>
<td>GAS SUPPRESSION SYSTEM</td>
<td>3.00</td>
<td>Nos</td>
<td>185386.00</td>
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<td></td>
<td>ROOM FLUIdING FOR SERVER AND BATTERY ROOM - Supply, Installation, Testing and Commissioning of Novec 1230, CCOE Approved 120.0 Ltrs. Cylinder :- 25m², V:- 100 m³ for server Room</td>
<td>3.00</td>
<td>Nos</td>
<td>185386.00</td>
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<tr>
<td>No.</td>
<td>Description</td>
<td>Quantity</td>
<td>Type</td>
<td>Amount</td>
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<td>855</td>
<td>Supply, Installation, Testing and Commissioning of Valve Assembly and arrangement for Supervisory</td>
<td>6.00</td>
<td>Nos.</td>
<td>101184.00</td>
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<td></td>
<td>Switch connection for monitoring cylinder pressure, a pressure gauge with a safety burst disc and safety cap.</td>
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<td>856</td>
<td>Supply, Installation, Testing and Commissioning of Master Cylinder Kit complete comprises of Electric Control Head operated electrically from the detection and control system or locally with a manual actuator, complete with cylinder supervisory switch.</td>
<td>6.00</td>
<td>Nos.</td>
<td>61986.00</td>
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<td>857</td>
<td>Supply, Installation, Testing and Commissioning of Manual Actuator Assembly complete with Flexible Interconnecting Hose, liver and manual pull station to activate the system manually.</td>
<td>6.00</td>
<td>Nos.</td>
<td>18784.00</td>
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<td>858</td>
<td>Supply, Installation, Testing and Commissioning of Wire Braided Flexible Rubber Hose with Elbow and connectors complete assembly to Connect Novec 1230 Cylinder Assembly Discharge outlet with Discharge Pipe or Discharge Manifold.</td>
<td>6.00</td>
<td>Nos.</td>
<td>7824.00</td>
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<td>859</td>
<td>Supply, Installation, Testing and Commissioning of Warning Signs and Plates for Inside Room and Outside Room application.</td>
<td>4.00</td>
<td>Nos.</td>
<td>1877.00</td>
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<tr>
<td>860</td>
<td>Supply, Installation, Testing and Commissioning of Primary Pressure Operated Slave Control head complete kit with Pneumatically pressure, Flexible interconnecting hose complete with cylinder supervisory switch.</td>
<td>2.00</td>
<td>Nos.</td>
<td>31463.00</td>
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<td>861</td>
<td>Supply, Installation, Testing and Commissioning of Discharge Nozzles to Discharge Novec 1230 Gas in the Hazard Area as hydraulic calculation and flow rate required in 180 Deg/360 Deg Discharge Pattern.</td>
<td>24.00</td>
<td>Nos.</td>
<td>21080.00</td>
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<td>862</td>
<td>Supply, Installation, Testing and Commissioning of Cylinder Bracket</td>
<td>6.00</td>
<td>No.</td>
<td>2191.00</td>
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<td>863</td>
<td>Supply, Installation, Testing and Commissioning of 1 Zone Fire Detection Panel with 1 Zone Gas Release Module with Battery back up</td>
<td>1.00</td>
<td>No.</td>
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<td>864</td>
<td>Supply, Installation, Testing and Commissioning of conventional Smoke Detector</td>
<td>6.00</td>
<td>No.</td>
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<td>865</td>
<td>Supply, Installation, Testing and Commissioning of conventional Heat Detector</td>
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<td>866</td>
<td>Supply, Installation, Testing and Commissioning of Manual Release Switch</td>
<td>6.00</td>
<td>No.</td>
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<td>867</td>
<td>Supply, Installation, Testing and Commissioning of Abort Switch</td>
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<td>868</td>
<td>Supply, Installation, Testing and Commissioning of Response Indicator</td>
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<td>869</td>
<td>Supply, Installation, Commissioning and Testing of A/V ALARM</td>
<td>18.00</td>
<td>No.</td>
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<td>870</td>
<td>4 Kg capacity NOVEC 1230, DLP Assembly with automatic valve, push in connector for tube, NOVEC 1230 gas, mounting bracket, End of Line adopter and low pressure switch for monitoring system activation.</td>
<td>15.00</td>
<td>No.</td>
<td>18777.00</td>
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<td>871</td>
<td>Linear pneumatic heat Detection Tube with all necessary fittings &amp; supports.</td>
<td>600.00</td>
<td>mtrs.</td>
<td>2295.00</td>
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Total: 57433608.69