

**U.P. STATE CONSTRUCTION AND INFRASTRUCTURE  
DEVELOPMENT CORPORATION LTD.**

(A Govt. of U.P. Enterprises)

(AN ISO 9001:2000 certified Organisation)

Reg. Office : T.C. – 46 V, Vibhuti Khand, Gomti Nagar, Lucknow (U.P.)

**FINANCIAL BID**

**FOR**

**Balance Work of Fire alarm and  
fire fighting at Medical college  
Agra**

**(UTTAR PRADESH)**

**(VOLUME-II)**

**Name of :.....**

**Address:.....**

.....

.....

.....

**U.P. State Construction and Infrastructure Development  
Corporation Ltd.  
Bill of Quantity**

Name of Work :- Estimate for Fire alarm and fire fighting at Medical college Agra.

| S.N. | Particulars  | Amount(Rs.Lac) |
|------|--------------|----------------|
| 1.   | Cost of work | 249.59         |
|      | <b>Total</b> | 249.59         |
| 2.   | Less 5 %     | (-)12.47       |
|      | <b>Total</b> | 237.11         |

J.E.

A.E.

E.E.



Rate offered by bidder (+) %  
Above/below  
In Word  
In Figures

Rs.....Lacs

Net Amount .....  
Rs.....

Signature of bidder

**Estimate for Fire Alarm and Fire Hydrant System**  
**At Medical College.Agra (U.P.)**

| S. No. | Description   | Unit | Qty. | Rate /Unit | Amount     |
|--------|---|------|------|------------|------------|
| 1      | 2   | 3    | 4    | 5          | 6          |
| 1      | Supplying Installation testing & Commissioning of Intelligent addressable 4 loop fire alarm control panel is able to connect 250 devices (Detector or Module ) per loop in any combination with 20 % spare address for detectors in line QVGA LCD display complete with inbuilt additional seven customized programmable function switch for direct activation of any device of control along with three programmable LED's indication along with 9A power supply inbuilt min.three notification appliance circuit with sufficient power supply to drive sounder cum strobe unit along with in built 50 AH UL listed battery charger along with require SMF batteries for 24 hours in normal condition (UL,ULC listed & CSFM,MEA,FM approved Make : GST /MORLEY/COOPER<br>(As per approved specification)   | No.  | 2    | 359972.00  | 719944.00  |
| 2      | Supplying Installation testing & Commissioning Intelligent Addressable 1 loop fire alarm control panel is able jto connect 250 devices (Detector or Module ) per loop in any combination with 20% spare address for detector in each & every loop should have min. 854 char LCD multi- line QVGA LCD display complete with inbuilt additional seven customized programmable function switch for direct activation of any device or control along with three programmable LED's indication along with 9A power supply inbuilt min three Notification appliance circuit with sufficient power supply to drive sounder cum strobe unit along with inbuilt 50 AH UL listed battery charger along with required SMF batteries for 24 hours in normal condition (UL,ULC listed & CSFM,MEA,FM approved Make : GST/MORLEY/COOPER<br>(As per approved specification) | No.  | 2    | 178000.00  | 356000.00  |
| 3      | Supplying Installation testing & Commissioning of Intelligent Addressable photo electric smoke detector with base as per specification with true alarm photo sensing technology selectable sensitivity from 0.2% to 3.7% / Ft, obscuration support digital communication and magnetically operated functional test as per UL listing (UL,ULC listed & CSFM,MEA,FM approved Make : GST /MORLEY/COOPER<br>(As per approved specification)   | No.  | 620  | 6529.00    | 4047980.00 |

| S. No. | Description   | Unit | Qty.  | Rate /Unit | Amount    |
|--------|---|------|-------|------------|-----------|
| 1      | 2   | 3    | 4     | 5          | 6         |
| 4      | Supplying Installation testing & Commissioning of Intelligent Addressable type heat Detector along with base as per specification rate of rise temperature range is at 8.3 degree c/ 11.1 degree c per min and fixed temperature sensign is independent of rete of rise sensing to to operate at 57.2 degree c /68 degree c support digital communication and magnetically operated functional test as per UL listing (UL,ULC listed & CSFM,MEA,FM approved Make : GST/MORLEY/COOPER<br><b>(As per approved specification)</b>                          | No.  | 40    | 5784.00    | 231360.00 |
| 5      | Supplying Installation testing & Commissioning of Remote red LED alarm indicator on single gang stainless steel plate.<br><b>(As per approved specification)</b>  | No.  | 160   | 550.00     | 88000.00  |
| 6      | Supplying Installation testing & Commissioning of Intelligent Addressable Manual Call points- double action Break Glass cum pull station suitable for wall/column mounting (UL,ULC listed & CSFM,MEA,FM approved Make : MORLEY/GST/COOPER<br><b>(As per approved specification)</b>   | No.  | 65    | 6597.00    | 428805.00 |
| 7      | Supplying Installation testing & Commissioning of Intelligent Addressable Hooter cum multi candela strobe.Unit as per specifications and customization of intensity selection as 15, 30 , 75 or 110 cd of strobe unit is possible by panel.Sounder sum strobe will be driven by supervised 24 V DC input and will give 80 db output at 3 m strobe unite will be synchronized 1 Hz strobe flash rate for better evacuation in complete facility.(UL,ULC listed & CSFM,MEA,FM approved Make : GST/MORLEY/COOPER<br><b>(As per approved specification)</b> | No.  | 65    | 9489.00    | 616785.00 |
| 8      | Supplying Installation testing & Commissioning Intelligent Addressable single Addressable Control Relay Module- Form "C" contact type.(UL,ULC listed & CSFM,MEA,FM approved Make :GST/MORLEY/COOPER<br><b>(As per approved specification)</b>   | No.  | 12    | 5000.00    | 60000.00  |
| 9      | Supplying Laying testing & Commissioning of 2 corex 1.5 sr.mm single standard copper conductor , PVC insulated armored cable.Make; RR Cable /Havells/finolax/<br><b>(As per approved specification)</b>   | RM   | 10000 | 80.00      | 800000.00 |

| S. No. | Description   | Unit | Qty. | Rate /Unit | Amount     |
|--------|---|------|------|------------|------------|
| 1      | 2   | 3    | 4    | 5          | 6          |
| 10     | Surface dressing of road with painting between using 2.25 kg. of bitumen per sq.mt with 1.65 cum of stone chipping ,13.2 mm nominal size/100 sq.mt of road surface including corolidation .(Although this job the fore will be given to civil contractor /Required Tank and pump house as per direction of Fire Department.<br><b>(As per approved specification)</b>                                       | SQM  | 750  | 1676.48    | 1257360.00 |
| 11     | Supplying Installation testing & Commissioning of Butterfly Value PN-16 slim seal standard lever operated type as per design standard IS:1395 or BS:5155 with required flanges ,nut,bolts etc . Complete in all respects.Make;Kartar<br><b>(As per approved specification)</b>  |      |      |            |            |
| 11.1   | 250 mm  | No.  | 3    | 20460.00   | 61380.00   |
| 11.2   | 200 mm  | No.  | 2    | 14386.00   | 28772.00   |
| 11.3   | 150 mm  | No.  | 30   | 7407.17    | 222215.10  |
| 11.4   | 100 mm  | No.  | 18   | 4405.83    | 79304.94   |
| 11.5   | 80 mm   | No.  | 50   | 3343.38    | 167169.00  |
| 12     | Supplying Installation testing & Commissioning of dual plate Non Return Value of following sizes PN-10 as per design standard IS:5312 or BS:1868 with companion flanges , nut, bolts etc . Complete in all respect .Make; Kartar<br><b>(As per approved specification)</b>  |      |      |            |            |
| 12.1   | 80 mm   | No.  | 2    | 4695.00    | 9390.00    |
| 12.2   | 100 mm  | No.  | 5    | 5923.00    | 29615.00   |
| 12.3   | 150 mm  | No.  | 15   | 7806.31    | 117094.65  |
| 13     | Supplying Installation testing & Commissioning of Manual Swing type Fire Hose Reel IS:444 complete with heavy duty reel ,19 mm dia 30 Mtr. Long . 2 ply polyster yam braided rubber braided pressure hose , Red colored , SS jet nozzle . 25 mm isolating value ande all other necessary fixing accessories complete in all respect .Make; Newage/M-Tech,New-Tech<br><b>(As per approved specification)</b> | Set  | 65   | 15006.00   | 975390.00  |
| 14     | Supplying fixing testing of Y type Strainer Glanged end as per following specification<br><b>(As per approved specification)</b>  |      |      |            |            |
|        | Body & Cover - ASTM A 216 GR WCB (Cast Steel)   |      |      |            |            |
|        | Mesh -S.S.304   |      |      |            |            |
|        | Gasket-CAF  |      |      |            |            |
|        | End Connection - Flanged End ,RF  |      |      |            |            |
|        | Rating -150#  |      |      |            |            |
|        | Flange Drilling - As per ANSI B 16.5 Class 150  |      |      |            |            |
|        | Body Hydro test -30.0 Kg.Cm.sq.   |      |      |            |            |
|        | 200 mm  | No.  | 2    | 26714.00   | 53428.00   |

| S. No. | Description  | Unit | Qty.   | Rate /Unit | Amount     |
|--------|--|------|--------|------------|------------|
| 1      | 2  | 3    | 4      | 5          | 6          |
| 15     | Supplying Installation testing & Commissioning of 25 mm Air Release Valve gunmetal having rubber ball and with 25 mm BSP threaded male inlet including necessary accessories and connections complete in all respect.<br><b>(As per approved specification)</b>  | Set  | 9      | 2800.00    | 25200.00   |
| 16     | Supplying Installation testing & Commissioning of 25 mm Ball Valve PN -1 gunmetal as per beating IS:778 including necessary accessories and connections. Make; Zoloto /Sant <b>(As per approved specification)</b>   | Set  | 75     | 1012.00    | 75900.00   |
| 17     | Providing/fixing of Weather proof standard fire hose cabinet (900 mm X 600 mm X 450 mm) Outdoor type made of not less than 16/18 SWGMS sheet having glassed hinged door (5 mm thick glass ) including necessary locking arrangement with handle for housing hydrant valve, two nos. 15 meter long fire hose pipes , branch pipe as required as per drawings. including brackets for mounting accessories , painting ( one coat primer and two coat of fire red color). The cabinet shall be mounted on self standing mounting type painted MS Angle iron frame as required . the words "FIRE HOSE" to be painted on the box.<br><b>(As per approved specification)</b> | No.  | 50     | 12075.00   | 603750.00  |
| 18     | Providing/Fixing of Fire Hose cabinet box made out of 18 gauge MS sheet including two coats of post office red paint over one coat of primer with 4 mm, thick glass door in front painted "FIRE" in red luminous paint. The size of the box should be 750 mm X 600 mm X 250 mm size capable of accommodating a pair of hose with coupling and nozzle. The box should be floor mounted type with railway coach lock arrangement and lever for opening the door after breaking the glass complete.<br><b>(As per approved specification)</b>   | No.  | 65     | 4833.00    | 314145.00  |
| 19     | Supplying fixing of Fire hose , RRL hose jacketed with circular woven synthetic fibre conforming to IS:636.88 63 mm dia X15 Mtr. Long with S.S.heavy duty , 63 mm .Pair of male and female instantaneous coupling having IS: 903 mark and duty S.S. wire wounded .Make; Newage/M-Tech,New-Tech<br><b>(As per approved specification)</b>   | No.  | 230    | 9906.00    | 2278380.00 |
| 20     | Supplying fixing of S.S.Branch pipe , short type with 63 mm male instantaneous intel , male threaded outlet , fitted with 15 mm bore nozzle having IS:903 mark .Make; Newage/Omex/Gitech<br><b>(As per approved specification)</b>   | Mtr. | 182.00 | 3279.00    | 596778.00  |

| S. No. | Description   | Unit | Qty. | Rate /Unit | Amount    |
|--------|---|------|------|------------|-----------|
| 1      | 2   | 3    | 4    | 5          | 6         |
| 21     | Supplying Installation testing & Commissioning of Centrifugal horizontal pumping set with bronze impeller with CI body and connected by a flexible Loe joy coupling with coupling guard to a totally enclosed with coupling guard to a totally enclosed fan cooler , TEFC sq. cage induction motor monted on a common strucural base plate complete as per specification including 1:2:\$ PCC foundation motor to be suitable for 415 volts ,3 phase ,50 cyclesAC Supply (IS:325). Make; Kirloskar<br><b>(As per approved specification)</b>  |      |      |            |           |
| 21.1   | Main Pump , Capacity-2850 lpm , Head - 88 M ,HP - 100.  | No.  | 1    | 658133.00  | 658133.00 |
| 21.2   | Fire Jocky Pump , Capacity-180 lpm , Head - 88 M ,HP - 15.  | No.  | 1    | 144372.00  | 144372.00 |
| 22     | Supplying Installation testing & Commissioning of Centrifugal horizontal pumping set with CI body and bronze impeller connected by means of a flexible Loe joy coupling with coupling guards to a diesel engine monted on a common structural base plate with electric panel better (including one set spare battery), automatic starting arrangements , exhaust pipe to discharge outside the building with muffler , 200 liters capacity day oil tank mounted on suitable structural supports complete in all respects as per specifications ready for use including 1:2:4 PCC foundation.Make; Kirloskar<br><b>(As per approved specification)</b> | Set  | 1    | 878888.00  | 878888.00 |
|        | BHP: 92   |      |      |            |           |
|        | Pump capacity : 2850 lmp at 88 M head   |      |      |            |           |
| 23     | Supplying Installation testing & Commissioning of Double flanged vertical air vessel fabricated from 6 mm thick MS plate with dished ends 250 mm dia DN 2 m high common for fire and jockey pump complete with spring loaded safety valve.<br>Test pressure 12 kg/Sq.cm)<br><b>(As per approved specification)</b>  | No.  | 11   | 22010.00   | 242110.00 |
| 24     | Supplying Installation testing & Commissioning of 100 mm dia flow Switches with pressure rating suitable for above fire pump compete in all respect.<br><b>(As per approved specification)</b>  | Set  | 10   | 4754.00    | 47540.00  |
| 25     | Supplying Installation testing & Commissioning of Pressure Guage ranging from 0 to 14 kg. per sq.cm. ISI marked from appovred manufactures complete in all respect.Make; H GURU<br><b>(As per approved specification)</b>   | No.  | 16   | 1066.00    | 17056.00  |

| S. No. | Description   | Unit | Qty. | Rate /Unit | Amount    |
|--------|---|------|------|------------|-----------|
| 1      | 2   | 3    | 4    | 5          | 6         |
| 26     | Supplying fixing of Cast iron body 63 mm dia male instantaneous intel coupling with housing cabinet (500X400X400 for 2 way and 600X400 for 4 way) cap and chain for fire brigade correction conforming to IS:904 and making connection with fire fighting pipe or underground water tank completing the work in all respect as per the directions of the Engineer-in-charge. Make; Newage/M-Tech, New-Tech<br><b>(As per approved specification)</b>  |      |      |            |           |
| 26.1   | Two way   | No.  | 4    | 11160.00   | 44640.00  |
| 26.2   | Four way  | No.  | 5    | 17949.00   | 89745.00  |
| 26.3   | Draw out connection   | No.  | 4    | 6200.00    | 24800.00  |
| 27     | Electrical Control Panel: Cubical type folllr mounted electrical control panel of 2 mm thick CRCA sheet for fire fighting pumps with suitable relas HRC fuses, contactor, star delta starter i/c lamps, ammeter, voltmeter selector switches, i/c lights for incoming and outgoing ladders, auxiliary switches, dry suction cutoff, single phase precent or copper bus bar etc. The panel shall be provided with interlocking arrangement between electric motor driver diesel engine umps so that only one pump can operated at one time and in case of any failure in engine driven pump shall be complete i/c all control wiring as required as mention below.<br><b>(As per approved specification)</b> | No.  | 1    | 431354.00  | 431354.00 |
|        | <b>Incoming</b>   |      |      |            |           |
|        | 1 no. 400 Amp 4 pole MCCB with 36 KA breaking capacity.   |      |      |            |           |
|        | 1 set 300 Amp capacity 4 nos aluminum bus bar with epoxy insulator, insulation tape required hole, nut bolts etc.   |      |      |            |           |
|        | 1 No. 96 X 96 mm 0 to 500 volts voltmeter with selector switch and HRC fuse with base.  |      |      |            |           |
|        | 1 set 3 nos. indicating lamp with HRC fuse and base.  |      |      |            |           |
|        | <b>Outgoing</b>   |      |      |            |           |
|        | 1 No. 200 amp 4 Pole MCCB with 16 KA breaking capacity and shut trip relay.   |      |      |            |           |
|        | 2 No. 63 amp 4 Pole MCCB with 16 KA breaking capacity.  |      |      |            |           |
|        | 1 No Star delta starter suitable for main motor pump set i/c CT, ammeter, auto/ manual selector switch etc.   |      |      |            |           |
|        | 2 star delta starter suitable for jockey motor pump set complete with auto/manual selector switch interconnection wiring from pressure switch to panel etc complete as per requirement of engineer in charge/PMC.<br><b>(As per approved specification)</b>   |      |      |            |           |



| S. No. | Description  | Unit | Qty.   | Rate /Unit | Amount    |
|--------|--|------|--------|------------|-----------|
| 1      | 2  | 3    | 4      | 5          | 6         |
| 28     | Supplying and laying of Insulated PVC sheathed ,Steel Aromed ,Copper Aluminum Conductor, 1100V grade Powder Cable . The cable shall be laid in tray /in trenches/on wall /floor etc. As required (Approx quantities only)Make; RR Cable /policab/finolax<br><b>(As per approved specification)</b>   |      |        |            |           |
| 28.1   | 4 crore x 10 sq.mm AL Cable  | Mtr. | 50.00  | 193.00     | 9650.00   |
| 28.2   | 2 crore x 2.5 sq.mm Cu Cable   | Mtr. | 100.00 | 161.00     | 16100.00  |
| 28.3   | 3.5 crore x 35 sq.mm AL Cable  | Mtr. | 50.00  | 342.00     | 17100.00  |
| 28.4   | 3.5 crore x 70 sq.mm AL Cable  | Mtr. | 100.00 | 950.00     | 95000.00  |
| 29     | Supplying and laying of Perforated GI sheet Cable Tray with necessary angle iron suspension supports, anchor fasteners etc. complete maximum height of suspension shall not exceed 500 mm size of the tray is 40 mm x 100 mm x40 mm and 2 mm thick complete in all respect. (If required as per site conditions)<br><b>(As per approved specification)</b>   | Mtr. | 40.00  | 341.00     | 13640.00  |
| 30     | Supplying and fixing of GI Eath Stripes, 25 mm x 3 mm shall be run or floor/ceiling/walls from the equipment to the nearest earth point. With necessary accessories as required such as clamp, screws etc. complete in all respect (Earth pit shall be executed by other agencies. <b>(As per approved specification)</b>  | Mtr. | 100.00 | 77.50      | 7750.00   |
| 31     | Earthing with GI Earth plate 600 mm x 6 mm x 3 mm thick including accessories and providing masonry enclosure with cover plate having locknig arrangement & watering pipe etc. (with charcoal or coke and salt) complete as required. <b>(As per approved specification)</b>   | No.  | 2      | 5890.00    | 11780.00  |
| 32     | Supplying and fixing of Self Glow Exit signage for stairs and exits size 100 x 300 <b>(As per approved specification)</b>  | No.  | 150    | 1705.00    | 255750.00 |
| 33     | Fire man axe <b>(As per approved specification)</b>  | No.  | 65     | 1568.00    | 101920.00 |
| 34     | Constructing masonry chamber 60 x 60 x 75 cms inside with 75 class designation brick work in cement mortar 1 : 5 ( 1 cement, 5 fine sand ) for sluice valve with CI surface for 10 mm top dia 180 mm deep (inside) with chained lid and RGC top slab 1:2:4 (1 cement, 2 coarse sand, 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 mix ( 1 cement, 5 fine sand and 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 flatting coat of neat cement & outside plaster finished rough complete as per standard design with FPS bricks.<br><b>(As per approved specification)</b> | No.  | 8      | 6754.00    | 54032.00  |
| 35     | Masonry enclosure cover<br><b>(As per approved specification)</b>  | No.  | 8      | 2263.00    | 18104.00  |

| S. No.                   | Description   | Unit | Qty.    | Rate /Unit | Amount             |
|--------------------------|---|------|---------|------------|--------------------|
| 1                        | 2   | 3    | 4       | 5          | 6                  |
| 36                       | CO2 type extinguisher 4.5 kg<br>(As per approved specification)   | No.  | 130     | 11014.00   | 1431820.00         |
| 37                       | ABC Type extinguisher 4 kg<br>(As per approved specification)   | No.  | 260     | 4417.00    | 1148420.00         |
| 38                       | Pressure Switch<br>(As per approved specification)  | No.  | 3       | 4030.00    | 12090.00           |
| 39                       | Providing & fixing of welding Heavy Quality Class 'C' , MS pipe conforming to IS : 1239 (part-1) for pipes up to 150 mm dia and IS: 3589-1991 for pipes above 150 mm including cutting, threading, welding, clamping fitting with elbow, socket nipple, clamping with MS angle iron supports and fasteners etc. also painting with red oxide and PO red enamel paint complete in all respects. Make Jindal (As per approved |      |         |            |                    |
| 39.1                     | 250 mm  | Mtr. | 0.00    | 6154.00    | 0.00               |
| 39.2                     | 200 mm  | Mtr. | 0.00    | 4760.00    | 0.00               |
| 39.3                     | 150mm   | Mtr. | 0.00    | 1975.00    | 0.00               |
| 39.4                     | 100 mm  | Mtr. | 0.00    | 1371.00    | 0.00               |
| 39.5                     | 80 mm   | Mtr. | 0.00    | 998.00     | 0.00               |
| 39.6                     | 65 mm   | Mtr. | 0.00    | 806.00     | 0.00               |
| 39.7                     | 50 mm   | Mtr. | 0.00    | 688.00     | 0.00               |
| 39.8                     | 40 mm   | Mtr. | 40.00   | 524.00     | 20960.00           |
| 39.9                     | 32 mm   | Mtr. | 24.00   | 462.00     | 11088.00           |
| 39.10                    | 25 mm   | Mtr. | 72.00   | 389.00     | 28008.00           |
|                          | As above but labour only  |      |         |            |                    |
| 39.1                     | 250 mm  | Mtr. | 15.00   | 1846.20    | 27693.00           |
| 39.2                     | 200 mm  | Mtr. | 54.00   | 1428.00    | 77112.00           |
| 39.3                     | 150mm   | Mtr. | 2150.00 | 592.50     | 1273875.00         |
| 39.4                     | 100 mm  | Mtr. | 200.00  | 411.30     | 82260.00           |
| 39.5                     | 80 mm   | Mtr. | 290.00  | 299.40     | 86826.00           |
| 39.6                     | 65 mm   | Mtr. | 45.00   | 241.80     | 10881.00           |
| 39.7                     | 50 mm   | Mtr. | 36.00   | 206.40     | 7430.40            |
| 39.8                     | 40 mm   | Mtr. | 40.00   | 157.20     | 6288.00            |
| 39.9                     | 32 mm   | Mtr. | 24.00   | 138.60     | 3326.40            |
| 39.10                    | 25 mm   | Mtr. | 72.00   | 116.70     | 8402.40            |
| 40                       | Construction of underground Reservoir / Tank & pump house as per Direction of Fire Department. Tank Capacity 100 KI & Pump house size 6 m x 5 m x 3.6 m height (As per approved specification)  | Job  | 1       | 2500000.00 | 2500000.00         |
| 41                       | Providing & Fixing of Single way landing valve 63 mm dia.gun metal instantaneous with female coupling with chain etc. complete.Make; Newage/M-Tech,New-Tech<br>(As per approved specification)  | No.  | 116     | 13102.00   | 1519832.00         |
| <b>Total For - Agra,</b> |   |      |         |            | <b>24959977.89</b> |

**Important Note :- All items above shall be supplied and executed as per enclosed specification attached as Annexure-'A'.**