

SOUTHERN RLY

**CONST-HQ-ENGG
Office of CAO, 183
EVR high Road,
Chennai, 600008
Tamil Nadu, India**

**Letter No: CONST-HQ-ENGG / 57-CECNMS-
2023-E-398266 / 10177330094789**

**Dated:
04/01/2024**

**M/s PRUDENT EPC PRIVATE LIMITED-
MUMBAI**

509, B WING, GOLF SCAPPE, B/H,, SUNNY
ESTATE, SION TROMBAY ROAD,
CHEMBUR

MUMBAI, Mumbai City, Maharashtra, India,
400071

MUMBAI- 400071

Maharashtra, India

Sub: Letter Of Acceptance

- Ref:**
1. Tender No. 57-CECNMS-2023-E-398266 closing date 29-11-2023 15:30 for PERAMBUR NEW RAILWAY HOSPITAL - Providing fire fighting arrangements to newly constructed OPD Block, A-Block, B-Block, D-Block & L-Block.
 2. Your bid ID **16036599** dated **29/11/2023 15:18**

The Competent Authority has accepted your offered rates in connection with the subject work. The total cost of the work at the accepted rates works out to Rs. 39826536.63 (Rupees Three Crore Ninety-Eight Lakh Twenty-Six Thousand Five Hundred And Thirty-Six Rupees And Sixty-Three Paise Only)

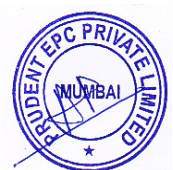
A sum of Rs.0 deposited as Earnest Money vide IREPS reference ID XE321220675676 Exemption (Start-up-DIPP Recognized) has been retained towards initial Security Money for due and faithful fulfillment of the contract, and the balance Security Money will be recovered from the progressive bills @ 6 % of the bill amount till it reaches 5 % of the contract value in terms of clause 27 of Tender Document Part A to C. This is, however, without prejudice at Railways right to retain any amount due for payment to you on the pending bills to make up the full security deposit in case you fail to fulfill the conditions of contract.

You are requested to submit Performance Guarantee in the form as given in Clause 24.0 of Tender Document Part A to C equivalent to 5 % of the contract value amounting to Rs.



1991326.83 (Rupees Nineteen Lakh Ninety-One Thousand Three Hundred And Twenty-Six Rupees And Eighty-Three Paise Only) within 21 days from the date of issue of Letter of Acceptance, valid up to stipulated date of completion plus 60 days so that contract agreement can be executed. Extension of time for submission of PG beyond 21 (Twenty one) days and upto 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21 (Twenty one) days, i.e. from 22nd day after the date of issue of LOA. Further, if the 60th day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day. In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit on the strength of their registration as a Start up recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect. The failed Contractor shall be debarred from participating in re-tender for that work. The PG should be submitted after the LOA has been issued, but before signing of the contract agreement. This PG shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of PG extended to cover such extended time for completion of work plus 60 days. The PG has to be executed in favour of the President of India acting through Financial Advisor & Chief Accounts Officer, Construction, Southern Railway, Chennai- 8 or concerned Sr. Assistant Financial Adviser/Construction only. The Bank Guarantee towards PG should be sent to Chief Engineer/Dy. Chief Engineer by the issuing bank under Registered Post (AD). This LOA is the due notice for submission of PG and that no further communication will be sent to you reminding for submission of PG. In case of failure to submit PG within stipulated date, action taken under clause 16(4) of GCC is final and binding.

The entire work shall be completed within 6 month from the date of issue of Letter of Acceptance. You should execute the work as per the MILE-STONE statement. You should submit a suitable programme for achieving the mile stones, within 15 days of receipt of this letter in consultation with the Dy. Chief Engineer / Executive Engineer in charge, failing which a PENALTY of Rs.50,000/- (Rupees Fifty thousand only) will be levied. You should carry out the work as per the Mile-stone statement furnished in the scope of work/enclosed to this Letter of Acceptance, and as per the agreed program. You are expected to adhere to the progress of work as per Mile-stone statement mentioned above and in case of your failure in achieving first 2 mile stones, the contract is liable to be terminated at your cost in



addition to the Penalty to be imposed for delays at the discretion of the Engineer-in charge.

Vitiation Clause : Applicable as per conditions of Contract Part A to C

Price variation of contract Clause : Applicable as per conditions of Contract Part A to C

Vitiation: Applicable as per conditions of Contract Part A to C

Failure of contract: In case of failure of the contract at any stage your contract will be terminated under Clause 62 of General Conditions of Contract and Performance Guarantee and Security Deposit will be forfeited.

Execution of Agreement: Agreement will be executed through IRWCMS portal.

Terms and Conditions: In addition to the above, the other terms and conditions given in the tender document submitted along with your offer will also be applicable and the contract agreement to be signed will be the replica of the same.

Shramik Kalyan: You are requested to register in SHRAMIK KALYAN portal i.e. www.shramikkalyan.indianrailways.gov.in as per the requirements therein and upload this Letter of Acceptance and also to upload the labour and their payment details as detailed in special condition of tender document part A to C.

Acknowledgement:: Please acknowledge the receipt of the LOA.

Copy to : CE/West/CN/MS

Copy to : CVO/SR

Copy to: DY.FA&CAO/CN/I/MS

Copy to :: Labour Enforcement Officer (Central), I, Madras Regional Labour Commissioner (Central), 35, Haddows Road, Chennai - 6.

All Other terms and conditions, as stipulated in the tender documents shall be applicable.

SRINIVASAN R
Dy.CE/CN/MAS
Digitally Signed
[View Signature Details](#)



Awarded Quantities And Rates

Item Sno.	Item Desc	Item Code	Item Qty	Qty Unit	Unit Rate(Rs)	Escl. (%)	Advt.Value (Rs)	Bid Rate/ Unit Rate		Bid Amount (Rs)
Schedule A-Items that are not covered by DSR 2021/USSOR 2021. (Item Directory - Not Applicable)							41922670.14	5.00	% Below	39826536.63
1	Items that are not covered by DSR 2021/USSOR 2021.	View Details				At Par	41922670.14			
Schedule Totals							39826536.63			
Total Value							41922670.14			39826536.63
							Rebate on Total Value (%)		0.00	
							Net Bid Value		39826536.63	

Item Breakup

Schedule	A-Items that are not covered by DSR 2021/USSOR 2021.					
Item - 1	Items that are not covered by DSR 2021/USSOR 2021.					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
1	8500096	Supply of Fire Fighting Application MS Hose Box to keep two number of hoses and 1 No. of branch pipe with nozzle having proper glass window type double door with universe open key, painted inside white and outside Post Office Red, near every hydrant point including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specifications and as directed by the Departmental Officers. Make: (Make: OMEX/ KARTAR/ SAFE GUARD/ Equivalent)	Numbers	37	6419.20	237510.40
2	8500097	Supply and fixing Hose Tray to accommodate 15 metre RRL Hose 2 Nos. and Branch pipe in Fire Duct as directed by the Departmental Officers.	Numbers	45	2633.76	118519.20
3	8500098	Wrapping and coating anti-corrosive treatment for the following under ground MS pipe having one coat of anticorrosive	Running Metre	120	377.60	45312.00



		metal primer, one layer of asphalt tar tape wound over th MS pipe as per standard methods as per standard specifications and as directed by the Departmental Officers. 150mm dia. Wrapping and coating				
4	8500099	Supply, erection, testing and commissioning of following sizes of Heavy Duty Foot Valve including all accessories such as MS flange of table E gaskets, bolts & Nuts etc installed at end of 150/200 mm dia. Suction pipe line at sump including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specificationa nd as directed by the Departmental Officers. Make: (Make: NORMEX/ KARTAR/Equivalent) 150mm dia. Heavy Duty Foot Valve at Pump Room	Numbers	7	26101.60	182711.20
5	8500100	Supply, erection, testing and commissioning of following sizes of Heavy Duty Foot Valve including all accessories such as MS flange of table E gaskets, bolts & Nuts etc installed at end of 150/200 mm dia. Suction pipe line at sump including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specificationa nd as directed by the Departmental Officers. Make: (Make: NORMEX/ KARTAR/Equivalent) 80mm dia. Heavy Duty Foot Valve at Pump Room	Numbers	13	7822.22	101688.86
6	8500101	Supply and providing 1000 Litres capacity Priming Tank made up of PVC Make: SINTEX/ Equivalent	Numbers	1	20768.00	20768.00
7	8500102	Priming Tank mounted with the Supporting Arrangement fabricated using MS Angle for the height of 3 metres from the floor level, inlet, outlet and drain arrangements inside the fire	Numbers	1	29730.10	29730.10



		fighting pump room as directed by the Departmental Officers.				
8	8500103	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 4 core 250 sq.mm Armoured Aluminium cable	Running Metre	100	3363.00	336300.00
9	8500104	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 3 core 10 sq.mm Armoured Copper cable	Running Metre	80	613.60	49088.00
10	8500105	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 10 core 2.5 sq.mm Armoured Copper cable	Running Metre	30	559.32	16779.60
11	8500106	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges,	Running Metre	60	156.94	9416.40



		necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 2 core 2.5 sq.mm Armoured Copper cable				
12	8500107	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 4 core 95 sq.mm Armoured Aluminium cable	Running Metre	240	870.84	209001.60
13	8500108	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 3 core 25 sq.mm Armoured Aluminium cable	Running Metre	135	1534.00	207090.00
14	8500109	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/	Running Metre	135	156.94	21186.90

		FINOLEX/ Equivalent) 2 core 2.5 sq.mm Armoured Copper cable				
15	8500110	Supply and laying of following sizes of Armoured Aluminium/Copper cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: POLYCAB/ PARAGON/ FINOLEX/ Equivalent) 1 core 6 sq.mm Flexible Copper cable	Running Metre	135	413.00	55755.00
16	8500111	Supply, erection, testing and commissioning of Pressure Gauge with 0 to 14kg range of reputed make with necessary valve, milling thread MS coupling fixed at delivery pipe line in pump house to read the developing pressure including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: (Make: H-GURU/ ISI MAKE/ Equivalent)	Numbers	12	1085.60	13027.20
17	8500113	Supply and keeping in position of 9 litres capacity Fire Buckets of 4 Nos. with Bucket stand as per standard specifications and as directed by the Departmental Officers.	Numbers	8	3020.80	24166.40
18	8500114	Supply, erection, testing and commissioning of Air Release Valve of 20mm dia. So as to release airlock in 100mm dia MS pipe at top most wet riser including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers.	Numbers	13	1019.52	13253.76

19	8500115	Providing, fixing Pipe Supports from columns / wall or suspenders from roof slab to suit various dia. Of pipes made out of GI/ MS adjustable rods threaded for a sufficient length to adjust the height of support along with clamping arrangement for holding pipes of anchor fastening, arrangement design of hanger and should conform with specifications. 80mm dia Wall or Suspenders	Numbers	397	592.36	235166.92
20	8500116	Providing, fixing Pipe Supports from columns / wall or suspenders from roof slab to suit various dia. Of pipes made out of GI/ MS adjustable rods threaded for a sufficient length to adjust the height of support along with clamping arrangement for holding pipes of anchor fastening, arrangement design of hanger and should conform with specifications. 65mm dia Wall or Suspenders	Numbers	406	566.40	229958.40
21	8500117	Providing, fixing Pipe Supports from columns / wall or suspenders from roof slab to suit various dia. Of pipes made out of GI/ MS adjustable rods threaded for a sufficient length to adjust the height of support along with clamping arrangement for holding pipes of anchor fastening, arrangement design of hanger and should conform with specifications 50mm dia Wall or Suspenders	Numbers	420	548.70	230454.00
22	8500118	Providing, fixing Pipe Supports from columns / wall or suspenders from roof slab to suit various dia. Of pipes made out of GI/ MS adjustable rods threaded for a sufficient length to adjust the height of support along with clamping arrangement for holding pipes of anchor fastening, arrangement design of hanger and should conform with specifications 25mm dia Wall or Suspenders	Numbers	1371	141.60	194133.60
23	8500119	Supply and fixing of stored pressure ABC (Mono Ammonium Phosphate) Powder Type Fire Extinguisher of 6 Kg capacity as per IS:15683 with pressure gauge, discharge hose & control	Numbers	248	2643.20	655513.60

		nozzle, wall mounting bracket, safety clip etc. including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: Omex/ Safety first/ Equivalent				
24	8500120	Supply and fixing Carbon-di-Oxide Gas Type 2 Kg capacity Fire Extinguisher as per New IS:15683, complete with control valve, discharge hose with horn, wall mounting bracket, safety clip etc. including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: Omex/ Safety first/ Equivalent	Numbers	236	7552.00	1782272.00
25	8500121	Supply and keeping in position of Trolley Mounted Type 22.5 kg Carbon-di-Oxide Fire Extinguisher as per IS:15683, complete with control valve, gun metal cap, pressure gauge, operation sticker, discharge hose, mounting trolley with moving wheel, safety clip etc. including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc. complete as per standard specification and as directed by the Departmental Officers. Make: Omex/ Safety first/ Equivalent	Numbers	6	33040.00	198240.00
26	8500122	Supply of Addressable intelligent fire alarm 4- Loop Panel which consists of display board which will have 160 character Display with Touch key pad, Mother board which will have CORTEX 32 Bit Processor, In built RS-485 Networking circuit for peer to peer networking, Inbuilt USB 2.0 port for upload and download of configuration tools, Two inbuilt programmable inputs, Two	Numbers	2	171100.00	342200.00

		inbuilt NACs and Three Programmable relays and 4 Loop Card Circuits, power supply board which will have SMPS fully protected board, which operates on 120 to 230 V AC A+/- 10% with 50/60 Hz, battery back up 24V DC with built-in charger, the panel have IP-50 rating Optional: for BMS integration MODBUS converter, Graphical software, Software for TCP/IP module, Provision for Auto dialler Approval UL Listed (Make: Ravel/ GST/ Apollo/ Honeywell/ Equivalent)				
27	8500123	Supply, installation, testing and commissioning of Loop Card which will have 254 devices of both detectors and modules in a single line circuit, SLC supports both Class A and Class B wiring Approval: (Make: Ravel/ GST/ Apollo/ Honeywell/ Equivalent)	Numbers	10	37760.00	377600.00
28	8500124	Supply and fixing of MONITOR MODULE suitable for 4 Loop panel with built in software data with adopter complete set for external devices (Make: Ravel/ GST/ Apollo/ Honeywell/ Equivalent)	Numbers	11	6608.00	72688.00
29	8500125	Supply and fixing of RELAY MODULE suitable for 4 Loop panel with built in software data with adopter complete set for external devices (Make: Ravel/ GST/ Apollo/ Honeywell/ Equivalent)	Numbers	13	7316.00	95108.00
30	8500126	Supply and fixing of 5 Amps Capacity power Supply Unit suitable for 4 x 2 Loop control panel (Make: Ravel/ GST/ Apollo/ Honeywell/ Equivalent)	Numbers	4	8024.00	32096.00
31	8500127	Supply and installation of PVC Casing cap of size100x50mm similar to Crown or similar brand conforming to IS 9537(Pt.3):1983, thickness2.4mm(heavy) to conceal the25mm MS pipes on the wall surface as directed by Engineer-in-Charge.	Running Metre	3600	194.70	700920.00
32	8500128	Supply and fixing single headed internal hydrant valve with instantaneous Gunmetal / Stainless Steel coupling of 63mm dia with cast iron wheel	Set	78	6139.00	478842.00

		ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal / Stainless Steel cap and chain as required: Single headed Stainless steel (18.9.2)				
33	8500129	Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 30M (18.17.1)	Set	41	8675.00	355675.00
34	8500130	Supply, and fixing 63mm dia, 15m long RRL hose pipe with 63mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required: Stainless Steel (Grade 304) (18.16.2)	Set	156	4448.00	693888.00
35	8500131	Supply, and fixing 63mm dia gun metal short branch pipe with 20mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required: Stainless Steel (Grade 304) (18.18.2)	Numbers	78	1662.00	129636.00
36	8500132	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories: Pendent Sprinkler (18.21.1)	Each	1076	522.00	561672.00
37	8500133	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories: Horizontal Side wall Sprinkler (18.21.3)	Each	1393	617.00	859481.00
38	8500134	Providing, installation, testing & commissioning of adjustable rosette plate for 15mm dia in white finish UL listed or FM approved complete as required. (18.29)	Each	1160	225.00	261000.00
39	8500135	Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm	Set	1160	1578.00	1830480.00

		NPT female thread with reducer, nipple, 2 side brackets, center bracket, stock bar of following sizes complete as required. 1000mm (18.25.2)				
40	8500136	Providing, fixing , testing & commission of installation control valve of cast iron body, brass/bronze working parts comprising of water motor alarm, bronze seat clapper, clapper arm and hydraulically driven mechanical gong bell to sound continuous alarm emergency releases, stainer, pressure switch, cock valve complete with drain valve and bypass, test control box, ball valves, MS pipe of required size, flanges, orifice plate, gasket etc of following sizes as required 100MM dia (18.24.2)	Set	4	45002.00	180008.00
41	8500137	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 200mm dia MS C Class Heavy Pipe (6.3mm thick) (18.7.9)	Metre	13	5463.00	71019.00
42	8500138	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 150mm dia MS C Class Heavy Pipe(18.7.8)	Metre	2222	3574.00	7941428.00
43	8500139	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe	Metre	508	2555.00	1297940.00

		on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 100mm dia MS C Class Heavy Pipe(18.7.7)				
44	8500140	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 80mm dia MS C Class Heavy Pipe(18.7.6)	Metre	1030	1885.00	1941550.00
45	8500141	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 65 mm dia MS C Class Heavy Pipe(18.7.5)	Metre	978	1614.00	1578492.00
46	8500142	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required: 50mm dia MS C Class Heavy Pipe(18.7.4)	Metre	1093	1281.00	1400133.00
47	8500143	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and	Metre	3568	744.00	2654592.00

		painting with two or more coats of synthetic enamel paint of required shade complete as required: 25mm dia MS C Class Heavy Pipe(18.7.1)				
48	8500144	Supplying, fixing, testing & commissioning of double flanged sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required. 150mm dia Sluice Valve(18.12.6)	Set	17	22762.00	386954.00
49	8500145	Supplying, fixing, testing & commissioning of double flanged sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required. 100mm dia Sluice Valve(18.12.5)	Set	9	14641.00	131769.00
50	8500146	Supplying, fixing, testing & commissioning of double flanged sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required. 80mm dia Sluice Valve at Sprinkler Header at Every Floor(18.12.4)	Set	24	10696.00	256704.00
51	8500147	Supply, erection, testing and commissioning of Non-Return Valve of following sizes conforming to IS : 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required: 150 mm dia NRV(18.14.7)	Set	5	17786.00	88930.00
52	8500148	Supply, erection, testing and commissioning of Non-Return Valve of following sizes conforming to IS : 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required: 100mm dia NRV (18.14.5)	Set	1	11050.00	11050.00
53	8500149	Supplying, fixing, testing & commissioning of double flanged	Set	4	7207.00	28828.00

		sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required: 50mm dia (18.12.2)				
54	8500150	Supply, erection, testing and commissioning of Non-Return Valve of following sizes confirming to IS : 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required: 50mm dia(18.14.2)	Set	1	5790.00	5790.00
55	8500151	Providing and fixing earth bus of 50mm x 5mm copper strip on surface for connections etc. as required (5.20)	Each	1	6855.00	6855.00
56	8500152	A) Supplying, installation, testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Diesel Driven Pump) (B) Horizontal type, multistage, centrifugal pump of cast of iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS 1520. (C) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant IS standard complete with auto starting mechanism, 12 /24 volts electric starting equipment, diesel tank, exhaust pipe extended upto 10 m outside pump house duly insulated with 50 mm thick glass wool with 1.0 mm thick aluminium sheet cladding, residential silencer, instruments and protection as per standard specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc. as required. (D) MS fabricated, common base plate, coupling, coupling guard, foundation bolts etc. as required. (E) Suitable cement concrete foundation duly plastered and with anti-Vibration Pads 2850 LPM at 88M head(18.2.1)	Set	1	684923.00	684923.00

57	8500153	A) Supplying, installation, testing and commissioning of Electric driven Main Fire Pump suitable for automatic operation and consisting of following, complete in all respects, as required: (B) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal conforming to IS 1520. (C) Suitable HP Squirrel cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415 volts, 3 phase 50 Hz, AC supply with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325. (D) M.S. fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required. (E) Suitable cement concrete foundation duly plastered with anti vibration pads. 2850LPM at 88M Head (18.1.1)	Set	2	452519.00	905038.00
58	8500154	(A) Supplying, installation, testing and commissioning of electric driven pressurisation pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Jockey Pump) (B) Horizontal type, multistage, centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS: 1520. (C) Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz AC supply with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS: 325. (D) M.S.fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required. (E) Suitable cement concrete foundation duly plastered and with anti vibration pads. 180LPM 88m head(18.3.1)	Set	2	127148.00	254296.00
59	8500155	(A) Supplying, installation, testing and commissioning of	Set	1	101859.00	101859.00

		<p>electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (terrace Pump) (B) Horizontal type, multistage, centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS: 1520. (C) Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz AC supply with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS: 325. (D) M.S.fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required. (E) Suitable cement concrete foundation duly plastered and with anti vibration pads. 900LPM at 35M Head(18.4.1)</p>				
60	8500156	<p>INCOMING 800A, 50kA 4 Pole MCCB, Ics=100% Icu Rating Digital Voltmeter 0-500V with selector switch Ammeter (0-800 A) with selector switch & CTs etc. LED type RYB phase indicating lamps, ON, OFF, trip indicating Set of Copper Bus Bar 1000Amps OUTGOING (Note: All outgoing feeders for pumps should have digital Ammeter with selector switches, and LED type ON, OFF, trip indicating lamps) MAIN FIRE PUMP 250 Amp, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 100 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets JOCKEY PUMP 125 Amp. 50kA TPN MCCB, Ics=100% Icu, with Suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic</p>	Set	1	575711.00	575711.00

		operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets DIESEL ENGINE CONTROL Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0-20 A DC Ammeter(18.5.6)				
61	8500157	Supply and Fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd for suitable dia MS pipe connection conforming to IS 904 as Required 4 way 150mm dia MS pipe(18.19.2)	Set	3	13974.00	41922.00
62	8500158	Supplying , installation, testing & commissioning of intelligent analog addressable photothermal detector complete with mounting base complete as required.(17.2.4)	Each	1102	2858.00	3149516.00
63	8500159	Supply, installation, testing and commissioning of Addressable Manual Call Point as manual call point complete as required(17.2.14)	Each	56	3871.00	216776.00
64	8500160	Supply, installation, testing and commissioning of intelligent Addressable programmable sounder complete as required (17.2.6)	Each	54	2651.00	143154.00
65	8500161	Supply and laying of 2 x 1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required(17.5.2)	Metre	11290	173.00	1953170.00
66	8500162	Supply , installation, testing and commissioning of addressable Fire Control Module complete as required.(17.2.10)	Each	14	3003.00	42042.00

67	8500163	Supply , installation, testing and commissioning of fault isolator complete with base as required(17.2.7)	Each	49	3270.00	160230.00
68	8500164	Supply, installation, testing and commissioning of 6 zone voice alarm controller with USB, MP3 player (including 6 zone button paging station) with seamless integration facility with the main fire alarm panel for voice evaluation complete as required. (17.3.1)	Each	13	126411.00	1643343.00
69	8500165	Supply, installation, testing and commissioning of 1.5/3/6W metal box ceiling / wall speakers complete as required(17.3.3)	Each	88	1793.00	157784.00
70	8500166	Supply, installation, testing and commissioning of amplifier 75 watt, 25 V rms operating at 240 Volt AC supply complete as required(17.3.7)	Each	5	145793.00	728965.00
71	8500167	Supply, installation, testing and commissioning of Voice command keypad 6 zone command keypad 6 zone, with microphone assembly complete as required(17.3.9)	Each	5	81756.00	408780.00
72	8500168	Suppling and drawing of cable Fire Retardant PVC insulated copper conductor cable in the existing surface / recessed steel conduit of following pairs, cores and size including connections and interconnection etc., as required. Speaker cable Single pair, 2-core, 1.5 Sq mm (17.5.3.1)	Metre	4720	54.00	254880.00
73	8500169	Supply, Installation, Testing and Commissioning of Central graphical fire Alarm management system to centrally monitor and operate the fire alarm system complete as required.(17.2.2)	Each	2	200611.00	401222.00
74	8500170	Supply of Addressable fire alarm Repeater Panel with 320 character / Touch screen LCD display with inbuilt reset, acknowledge and silence switches complete as required. (17.2.3)	Each	1	108688.00	108688.00
					Total	41922670.14

