Tender Inviting Authority: JOINT MANAGER [ELECTRICAL DIVISION] , THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD,

## Name of work :-SUPPLY, INSTALLATION, TESTING & COMMISIONING OF FIRE ALARM & FIRE HYDRANT WORK AT DISTRICT JUDGE COURT BUILDING AT NAWARANGPUR IN THE DIST. OF NAWARANGPUR.

## Contract No:BID REF NO.- 18/JM/ ELECT/OPHWC/2019-20

Bidder Name					
	SCHEDUL	E OF WORK	<u>s</u>		
SI. No.	Description of work	Qty.	Unit	Estimated Rate	AMOUNT Rs.
G	FIRE ALARM SYSTEM				
1	Supply of New Intellegent Fire Control Panel- Single loop expandable to 2 loops, Maximum 477 addressable devices, 30 Zone, 2 Bell Circuit, Integrated PSU with Battery Charger , Excluding Batteries. (Certificated by LPCB) Make: GST, L&T, Bosch	No	1.00	₹ 80,782.14	₹ 80,782.14
2	Supply of Intelligent Optical Detecter, Drift	NO	1.00	\$ 80,782.14	\$ 80,782.14
2	Comensation, Sensitivity Adjustment, 8 Bit Processor Conventional Combined Optical Smoke. (Certificated by LPCB) Make: GST, L&T, Bosch)	No	165.00	₹ 2,777.67	₹ 458,315.55
3	Supply of Common Detector Base for			,	
	addressable and conventional detector(Certified by LPCB)	No	165.00	₹ 255.36	₹ 42,134.4
4	Supply of New addressable Loop Powered	NU	105.00	X 255.50	(42,134.4
	Combined Base mount Sandwich Type sounder and strobe, Multi Tone, 80 DB @ 1 m FOR i Series Detectors Conventional Combined Sounder and Strobe, (Certificated by LPCB) Make: GST, L&T, Bosch	No	14.00	₹ 5,216.07	₹ 73,024.9
5	Supply of Addressable Fire Fighters	NU	14.00	\$ 3,210.07	X 73,024.9
U	Telephone Jack	No	14.00	₹ 1,205.35	₹ 16,874.9
6	Semi Flush Mounting Re-settable (Non Breaking Glass), Supplied with special Rest tool- Compatible with both I & DI Series (Certificated by LPCB) Make: GST, L&T,	N	14.00		
7	Bosch Supply of Anti Tamper Security Cover -	No	14.00	₹ 4,393.75	₹ 61,512.5
/	Protects call point from accidental operation.	Mtrs	14.00	₹ 425.00	₹ 5,950.0
8	Supply of Digital Input Module	No	2.00	₹ 4,910.71	₹ 9,821.4
9	Supply of Digital output Module	No	1.00	₹ 4,910.71	₹ 4,910.7
10	Supply of 8 Zone master fire telephone panel	No	1.00	₹ 57,589.28	₹ 57,589.2
11	Supply of Fire Fighters Telephone Reciver	No	1.00	₹ 2,232.14	₹ 2,232.1
12	Supply and laying of 2 Core 1.5 Sq mm cable in Rigid PVC Pipe per running metre of cable used. Make: Finolex, Polycab, Havells	No	4,000.00	₹ 66.96	₹ 267,840.0
13	4"x4" GI box	No	165.00	₹ 89.29	₹ 14,732.8
14	Battery	No	2.00	₹ 1,339.28	₹ 2,678.5
15	System installation, testing and commissioning charges	No	1.00	₹ 12,000.00	₹ 12,000.0
Ι	FIRE HYDRANT SYSTEM				

			1		
1	Supply, of MS Class B pipes ISI Marked of				
	TATA or other approved equivalent make				
	with welded joints including painting with				
	Post Office Red Paint with all required				
	specials such as bends, tees, reducers, gaskets,				
	nuts, bolts, clamps etc as required.				
а	150 mm dia	400	RM	₹ 1,450.00	₹ 580,000.00
2	Supply, of GM Single headed hydrant valve				
	with 63 mm oblique outlet with blank PVC	18	Each	₹ 7,500.00	₹ 135,000.00
	cap with chain as per IS 5290				
3	Supply, of CI Sluice Valves of 150 mm dia as	6	Each	₹ 8,100.00	₹ 48,600.00
	per IS 780 .	0	Each	. 0,100.00	( 10,000.00
4	Supply, of Hose boxes to accommodate 2 sets				
	of Type A hoses of 30 mt length each and with				
	1 pair of Male and Female coupling and one				
	branch pipe with nozzle. The cabinet shall be	15	Each	₹ 5,800.00	₹ 87,000.00
	made of 16 SWG MS sheet with a double door	15	Each	( 5,000.00	(07,000.00
	glass front and painted with Scarlet Red				
	colour of Size 30"x24"x10" wall mounted.				
5	Supply of Type A Hoses 63 mm dia of 15 m				
	length with heavy quality GM coupling as per	15	Each	₹ 3,800.00	₹ 57,000.00
	IS 8423				
6	Supply GM branch pipe with 63 mm dia				
	female inlet and male threaded outlet with	15	Each	₹ 2,100.00	₹ 31,500.00
	hexagonal based nozzle as per IS 903				
7	First aid Hose reel drum of 180° swinging				
	type with 19mm dia Rubber braided hose of				
	30M. length with Ball Valve and 6mm	15	Each	₹ 9,400.00	₹ 141,000.00
	diameter Shut off nozzle, complete. The hose				
	reel shall conforming to IS 884				
	Supply of automatic centrifugal pumpset of				
	approved make ( Horizental Split type) for				
	giving discharge of 2280 lpm with suitable				
	HP TEFC motor to operate 400 /440 volts 3				
	phase 50 cycles AC supply with a terminal				
	box suitable for the reception of power cable	1	Each	₹ 425,000.00	₹ 425,000.00
	termination, common base plate, necessary				
	foundation bolts and accessories, pressure				
	gauges, test valve connections etc., all as per				
	detailed specification. Make- Kirloskar, Type-				
	DSM 125/40				
8	Supply of centrigugal jockey pump of				
	approved make, which gives a discharge of				
	180 lpm of 88 mtrs head , with suitable				
	electrical driven motor when running at 2800	1	Each	₹ 92,050.00	₹ 92,050.00
	rpm. When directly coupled to suitable HP	-			.,
	TEFC motor, foot valve etc, complete. all as				
	per detailed specification.Make- Kirloskar,				
	Type- CPHM 25/26A				

power electric starting motor as well as manual starting by electric start motor) with control panel comprising of pressure switch, pressure gauge, electronic calibrated relay starter, repearter relay push button switch for manual starting, is insulation & clading for exhaust pipe all as per the detailed specification. Make- Kirloskar. <ul> <li>Supply, of Metather proof control panel for the motors.</li> <li>Construction of Valve Chamber for sluice Valve of size 1000 x 1000 x1200 mm with 230 mm thick brick wall and MS chequred plate.</li> <li>Supply of air cusion vessel (1 m length and 250 mm dia, 4 mm thick MS plate) with drain and safety valve.</li> <li>Supplying, of fire brigade inlet connection conforming to IS 5290 comprising of 4nos. 63mm dia instanteneous couplings complete 1 Each</li> <li>Supply, of O due to Hose boxes to accommodate 2 sets of Type A hoses of 30 mt length each and with 1 pair of Male and female coupling and one branch pipe with.</li> <li>Supply), of O due door Hose boxes to accommodate 2 sets of Type A hoses of 30 mt length each and with 1 pair of Male and female coupling and one branch pipe with.</li> <li>Supply of firetrail Pressure switches of suitable range (0 to 12 bar) for pumpsets complete with necessary Ball valves, Fittings like unions / colors / reducers etc. (Standard type for main pump &amp; Differential type for Jockey Pump)</li> <li>Supply of O actor Hose, Stander and gained with necessary Ball valves, fittings like unions / colors / reducers etc.</li> <li>Supply of Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gasket etc.</li> <li>Supply of, Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gasket etc.</li> <li>Supplying, Cast Iron body flanged Y - type Stainer with SS sc</li></ul>		1		1	Г Ч	
the motors.       1       Each       ₹ 150,000.00       ₹ 150,000.00         Construction of Valve Chamber for sluice Valve of size 1000 x 1000 x1200 mm with 230 mm thick brick wall and MS chequred plate.       1       ₹ 14,000.00       ₹ 14,000.00         Supply of air cusion vessel (1 m length and 250 mm dia, 4 mm thick MS plate) with drain and safety valve.       1       Each       ₹ 8,500.00       ₹ 8,500.00         9       Supplying, of fire brigade inlet connection conforming to IS 5290 complets with C1 non-return valve, C1 butterfly valve, connected to 150 mm dia for tank filling.       1       Each       ₹ 11,040.00       ₹ 11,040.00         Supplying, of Out door Hose boxes to accommodate 2 sets of Type A hoses of 30 mtr length each and with 1 pair of Male and female coupling and one branch pipe with nozzle . The cabinet shall be made of 16 SWG MS sheet with a double door glass front and painted with Scarlet Red colour of size 30 " x 24" x 10" wall mounted.       8       Each       ₹ 18,000.00       ₹ 144,000.00         10       Supply of differential Pressure switches of suitable range (0 to 12 bar) for pumpsets complete with necessary Ball valves, Fittings like unions / colors / reducers etc.       1       Each       ₹ 2,500.00       ₹ 2,500.00         11       Supply of Dressure gauges of suitable range (0 lob kar), 100 mm diameter dial for pumpsets completes with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.       1       Each       ₹ 920.00       ₹ 920.00         12       Supplying,		approved make (Horizental Split casing type) for giving discharge of 2280 lpm of water at a pressure of 88 KSC complete with adequate HP automaic diesel engine driven pumpset having the residential silencer system and other accessories like fuel tank, necessary cooling system, day oil storage tank as per detailed specification and two sepate starting mechanism (automatic starting by battery power electric starting motor as well as manual starting by electric start motor) with control panel comprising of pressure switch, pressure gauge, electronic calibrated relay starter, repearter relay push button switch for manual starting , insulation & clading for exhaust pipe all as per the detailed	1	Each	₹ 625,410.00	₹ 625,410.00
Valve of size 1000 x 1000 x1200 mm with 230 mm thick brick wall and MS chequred plate.       I       Each       ₹ 14,000.00       ₹ 14,000.00         Supply of air cusion vessel (1 m length and 250 mm dia, 4 mm thick MS plate) with drain and safety valve.       I       Each       ₹ 8,500.00       ₹ 8,500.00         9       Supplying, of fire brigade inlet connection connected to 150 mm dia for tank filling.       I       Each       ₹ 11,040.00         9       Supply, of Out door Hose boxes to accommodate 2 sets of Type A hoses of 30 mt length each and with 1 pair of Male and female coupling and one branch pipe with nozzle. The cabinet shall be made of 16 SWG MS sheet with a double door glass front and painted with Scarlet Red colour of size 30 " x 24" x 10" wall mounted.       8       Each       ₹ 18,000.00       ₹ 144,000.00         10       Supply of differential Pressure switches of suitable range (0 to 12 bar) for pumpsets complete with necessay Ball valves, spitning like unions / colors / reducers etc. (Standard type for main pump & Differential type for Jockey Pump)       1       Each       ₹ 2,500.00       ₹ 2,500.00         11       Supply of Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gaskets etc.       1       Each       ₹ 920.00       ₹ 920.00			1	Each	₹ 150,000.00	₹ 150,000.00
250 mm dia, 4 mm thick MS plate) with drain and safety valve.       1       ₹ 8,500.00       ₹ 8,500.00         9       Supplying, of fire brigade inlet connection conforming to IS 5290 comprising of 4nos. 63mm dia instantaneous couplings complete with C1 non-return valve, CI butterfly valve, connected to 150 mm dia for tank filling.       1       Each       ₹ 11,040.00       ₹ 11,040.00         Supply, of Out door Hose boxes to accommodate 2 sets of Type A hoses of 30 mtr length each and with 1 pair of Male and female coupling and one branch pipe with nozele. The cabinet shall be made of 16 SWG MS sheet with a double door glass front and painted with Scarlet Red colour of size 30 " x 24" x 10" wall mounted.       8       Each       ₹ 18,000.00       ₹ 144,000.00         10       Supply of differential Pressure switches of suitable range (0 to 12 bar) for pumpsets complete with necessary Ball valves, Fittings like unions / colors / reducers etc. (Standard type for main pump & Differential type for Jockey Pump)       1       Each       ₹ 920.00       ₹ 920.00         11       Supply of Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gaskets etc.       1       Each       ₹ 920.00       ₹ 920.00		Valve of size 1000 x 1000 x1200 mm with 230 mm thick brick wall and MS chequred plate.		Each	₹ 14,000.00	₹ 14,000.00
9       Supplying, of fire brigade inlet connection conforming to IS 5290 comprising of 4nos. 63mm dia instantaneous couplings complete with CI non-return valve, CI butterfly valve, connected to 150 mm dia for tank filling.       1       Each       ₹ 11,040.00       ₹ 11,040.00         Supply, of Out door Hose boxes to accommodate 2 sets of Type A hoses of 30 mtr length each and with 1 pair of Male and female coupling and one branch pipe with nozzle. The cabinet shall be made of 16 SWG MS sheet with a double door glass front and painted with Scarlet Red colour of size 30 " x 24" x 10" wall mounted.       8       Each       ₹ 18,000.00       ₹ 144,000.00         10       Supply of differential Pressure switches of suitable range (0 to 12 bar) for pumpsets complete with necessay Ball valves, Fittings like unions / colors / reducers etc.       1       Each       ₹ 2,500.00       ₹ 2,500.00         11       Supply of Pressure gauges of suitable range (0 to 6 to 12 bar) for pumpsets complete with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.       1       Each       ₹ 920.00       ₹ 920.00         12       Supplying, of Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gaskets etc.       1       Each       ₹ 920.00       ₹ 0.00		250 mm dia, 4 mm thick MS plate) with drain		Each	₹ 8,500.00	₹ 8,500.00
accommodate 2 sets of Type A hoses of 30 mtr       accommodate 2 sets of Type A hoses of 30 mtr       8       Each       ₹ 18,000.00       ₹ 144,000.00         Image: the set of the set of the set of painted with Scarlet Red colour of size 30 " x 24" x 10" wall mounted.       8       Each       ₹ 18,000.00       ₹ 144,000.00         Image: the set of the set of suitable range (0 to 12 bar) for pumpsets complete with necessay Ball valves, Fittings like unions / colors / reducers etc. (Standard type for main pump & Differential type for Jockey Pump)       1       Each       ₹ 2,500.00       ₹ 2,500.00         Image: the set of the set of suitable range (0 16 bar), 100 mm diameter dial for pumpsets completes with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.       1       Each       ₹ 920.00       ₹ 920.00         Image: the set of the set of suitable range (0 16 bar), 100 mm diameter dial for pumpsets completes with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.       1       Each       ₹ 920.00       ₹ 920.00         Image: the set of the set of state range with suitable flanges, bolts, nuts, washers, gaskets etc.       1       Each       ₹ 920.00       ₹ 920.00	9	Supplying, of fire brigade inlet connection conforming to IS 5290 comprising of 4nos. 63mm dia instantaneous couplings complete with CI non-return valve, CI butterfly valve,			₹ 11,040.00	₹ 11,040.00
suitable range (0 to 12 bar) for pumpsets complete with necessay Ball valves, Fittings like unions / colors / reducers etc. (Standard type for main pump & Differential type for Jockey Pump)       1       Each       ₹ 2,500.00         11       Supply of Pressure gauges of suitable range (0- 16 bar), 100 mm diameter dial for pumpsets completes with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.       1       Each       ₹ 920.00       ₹ 920.00         12       Supplying, of Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gaskets etc.       1       Each       ₹ 920.00		accommodate 2 sets of Type A hoses of 30 mtr length each and with 1 pair of Male and female coupling and one branch pipe with nozzle. The cabinet shall be made of 16 SWG MS sheet with a double door glass front and painted with Scarlet Red colour of size 30 " x	8	Each	₹ 18,000.00	₹ 144,000.00
16 bar), 100 mm diameter dial for pumpsets completes with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.       1       Each       ₹ 920.00         12       Supplying, of Cast Iron body flanged Y - type Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gaskets etc.       1       Each       ₹ 920.00	10	suitable range (0 to 12 bar) for pumpsets complete with necessay Ball valves, Fittings like unions / colors / reducers etc.( Standard type for main pump & Differential type for Jockey Pump)	1	Each	₹ 2,500.00	₹ 2,500.00
Stainer with SS screen complete with suitable flanges, bolts, nuts, washers, gaskets etc. ₹ 0.00	11	16 bar), 100 mm diameter dial for pumpsets completes with necessary Ball valves, siphon,		Each	₹ 920.00	₹ 920.00
a         200mm nominal dia         3         Each         ₹ 23,780.00         ₹ 71,340.00	12	Stainer with SS screen complete with suitable				₹ 0.00
	а	200mm nominal dia	3	Each	₹ 23,780.00	₹ 71,340.00

10	1 1				
12	Supplying, of Cast Iron body, Leaded Tin				
	Bronze wedge/ ring, flanged Sluice valve of				
	Non rising spindle type as per IS:14846, PN				₹ 0.00
	16 Rating, for suction and delivery side of the				
	pumps with flanges, bolts, nuts, washers,				
	gaskets etc.			<b>T</b> ( 000 00	7 4 9 4 9 9 9 9
a	150 mm nominal dia	2	Each	₹ 6,800.00	₹ 13,600.00
13	Supplying, of Cast Iron body, Nitrile				
	Reinforced rubber ball type Non-return valves				<b>T</b> 0 00
	confirming to IS:5312 with required flanges,				₹ 0.00
	nuts, bolts and gaskets etc. complete.				
a	150 mm nominal dia	2	Each	₹ 6,800.00	₹ 13,600.00
13	Supplying, of CI Foot Valve of following				₹ 0.00
	sizes.				
а	150 mm nominal dia	1	Each	₹ 6,800.00	₹ 6,800.00
14	Supplying, of Gun metal chrome finished air				
	release valves with fittings of screwed end				₹ 0.00
	type.				
a	50mm nominal dia	20	Each	₹ 1,850.00	₹ 37,000.00
b	25mm nominal dia	25	Each	₹ 1,500.00	₹ 37,500.00
	Supply of approved make of 25 mm dia automatic air release valve spring loaded type	20	Each	₹1140.00	₹ 22 800 00
	complete with unions etc complete.	20	Each	₹ 1,140.00	₹ 22,800.00
15	Supplying of Pre fabricated M.S structural		+ +		
15	steel supports such as angle, Channel, Plate				
	etc. conforming to relevant IS standards for				
	laying above ground Hydrant Pipe. Quoted				₹ 52,500.00
	rate shall inclusive of one coat of primer and				( 52,500.00
	one coat of synthetic enamel paint of approved				
	shade.	700	Kg	₹ 75.00	
16	Supplying, of flow switch (water flow detector)		8		
	, Flow switch shall have a paddle made of				
	flexible material of the widthto fit within the				
	pipe bore. The terminal box shall be mounted				
	over the paddle/ pipe through a connecting				
	socket. The switch shall be potential free in				
	either NO or NC position as required. The				₹ 0.00
	switch shall be able to trip and make/ break				
	contact on the operation of a sprinkler head.				
	The terminal box shall have connections for				
	wiring to the Fire alarm panel. The seat shall				
	be of stainless steel. The flow switch shall				
	be of stainless steel. The flow switch shall have IP: 55 protection.				
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia	2	Each	₹ 16,970.00	₹ 33,940.00
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m				
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per	2	Each Each	₹ 16,970.00 ₹ 4,400.00	
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per 8423				₹ 17,600.00
J1	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per 8423 FIRE EXTINGUISHERS MAKE- KANEX				₹ 17,600.00
J 1	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per 8423 <b>FIRE EXTINGUISHERS MAKE- KANEX</b> Supply installation testing and commissioning				₹ 17,600.00
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per 8423 <b>FIRE EXTINGUISHERS MAKE- KANEX</b> Supply installation testing and commissioning of Clean Agent 2 ltrs capacitry Fire				₹ 17,600.00
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per 8423 <b>FIRE EXTINGUISHERS MAKE- KANEX</b> Supply installation testing and commissioning of Clean Agent 2 ltrs capacitry Fire Extinguisher with initial charge complete				₹ 17,600.00 ₹ 0.00
	be of stainless steel. The flow switch shall have IP: 55 protection. 100mm nominal dia Supply of Type A Hoses 63 mm dia of 30 m length with heavy quality GM coupling as per 8423 <b>FIRE EXTINGUISHERS MAKE- KANEX</b> Supply installation testing and commissioning of Clean Agent 2 ltrs capacitry Fire	4	Each	₹ 4,400.00	₹ 33,940.00 ₹ 17,600.00 ₹ 0.00 ₹ 172,000.00

2	Supply installation testing and commissioning of CO2 4.5kg capacity Fire Extinguisher made from seamless steel cylinder with initial charge complete with wall fixing bracket. The extinguisher shalconform to IS2878 and have certification mark engraved.		Each	₹ 3,500.00	₹ 70,000.00
3	Supply and installation testing and commissioning of DCP 5kg capacitry Fire Extinguisher with brass forging cap, 120 Gms CO2gas cartridge inner container, hose and plain nozzle supplied with initial charge complete with wall fixing bracket. The extinguisher shall conform to IS 2171 and have Certificate mark engraved.	2	Each	₹ 2,460.00	₹ 4,920.00
4	Supply installation testing and commissioning of Mechanical foam type 9 ltrs capacitry Fire Extinguisher (AFFFConcentrate) with upright operation with air induction nozzle, 60Gms CO2 gascartridge supplied with initial charge complete with wall fixing bracket. The extinguisher shall conform to IS10204 and have Certification mark engraved	2	Each	₹ 1,375.00	₹ 2,750.00
К	Illuminated Signage				₹ 15,000.00
L	System Integration charges				₹ 200,000.00
	CESS				44352.69
	Total Rs.				4479622.12
	Total Estimated Cost in Figures.				4479622.00
EXCESS	LESS (Please Tick)			%	
	Quoted Amount in Figures.				
	Quoted Amount in words				



Signature of Tenderer with seal

Sd/-Asst. Project Manager (Elect.)

> Sd/-Consultant (Elect.)

Sd/-Asst. Project Manager Elect.(Hqr)

Sd/-Joint Manager (Elect.)