

	Name of Work:"ANNUAL MAINTENANCE CONTRACT FOR SPRINKLING SYSTEM INSIDE CARGO JETTY AREA FOR COAL DUST SUPPRESSION IN 40 HECTARE AREA COAL YARD FOR 5 YEARS."				
ESTIMATE					
PART - A (CIVIL WORK)					
Item No.	Item Description	Qty.	Unit	Rate	Amount
1	Operation and Maintanance of the complete system including spare parts, Consumable, Labour Charges, Plmber charges, Electrician Charges, Mechenical Charges, operator charges and any other Labour and machinary required for Operation and maintainance of complete sprinkling system. (PUMP OPERATOR WITH HELPER IS REQUIRED ALL DAYS REST ARE AS AND WHEN REQUIRED FOR MAINTANANCE PURPOSE),	60.00	Month		
2	Supply of potable water through tanker for sprinkeling system inside cargo jetty area at new kandla.	662,500.00	Kl		
3	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	1,788.00	m2		
4	Hacking of CC flooring/plastered surface including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	1,788.00	M2		

Item No.	Item Description	Qty.	Unit	Rate	Amount
5	Plastering with cement mortar 1 : 4 including cleaning, finishing smooth curing etc. complete.				
a)	12 mm cement plaster of mix 1:4 (1 cement: 4 fine sand)	1788.00	M2		
6	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
A	Water thinnable cement primer	1788.00	m2		
7	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :				
A	New work (two or more coats) over and including water thinnable priming coat with cement primer	582.00	m2		
8	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture	10.00	m2		
9	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
a	On steel work	1110.00	m2		
10	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.	1799.00	m2		

Item No.	Item Description	Qty.	Unit	Rate	Amount
11	Supply, Installation, Testing and Commissioning of Cast iron Non- Return valve including companion flanges, gasket, nut-bolt & washer as per and Painting as per Client's Specifications.(Rates are including removing of existing valve and same should be deposited in main store new kandla)				
a	100NB	1.00	No		
a	200 NB	1.00	No		
12	Supply, Installation, Testing and Commissioning of Under ground M.S ERW, Heavy duty pipe including fittings, flanges, gasket, nut-bolt & washer, wrapping-coating etc. as per specification The unit rate of pipe shall include the cost of fittings, Painting, wrapping-coating etc. Specifications.(Rates are including removing of existing pipe by excavating and refilling and same should be deposited in main store new kandla)				
a	250NB	10.00	mtr		
b	200NB	500.00	mtr		
c	150NB	500.00	mtr		
13	Sprinkler nozzles of capacity 3636LPM @ 9BAR pressure including compinion flanges and fixtures complete with all accessories as per Specification.	6.00	No		

Item No.	Item Description	Qty.	Unit	Rate	Amount
14	Supply, Installation, Testing and Commissioning of Motorised Gate Valve (Valve: Cast Iron Gate valve including companion flanges, gasket and painting) (Actuator: as per specification) as per specification. (Rates are including removing of existing valve and same should be deposited in main store new kandla)				
a	150NB	4.00	No		
15	Supply, Installation, Testing and Commissioning of Motorised Gate Valve (Valve: Cast Iron Gate valve including companion flanges, gasket and painting) (Actuator: as per specification) as per specification. (Rates are including removing of existing valve and same should be deposited in main store new kandla)				
a	150NB	4.00	No		
b	250NB	1.00	No		
16	Supply, Installation, Testing and Commissioning of gun metal air release valve with isolation globe valve including compinion flanges and all fixture accessories as per specification. (Rates are including removing of existing valve and same should be deposited in main store new kandla)				

Item No.	Item Description	Qty.	Unit	Rate	Amount
a	50 NB	1.00	No		
17	Supply, Installation, Testing and Commissioning of Electrical motor driven Horizontal Centrifugal Sprinkler pump of Capacity : 273 cu.mtrs/hr, 105 MWC complete with motor, base frame, coupling, coupling guard etc. as per specification. (2W+1S)	1.00	No		
18	Supply, Installation, Testing and Commissioning of Cast Iron Gate valve including companion flanges, gasket and painting as per specification. (Rates are including removing of existing valve and same should be deposited in main store new kandla)				
a	350 NB	1.00	No		
b	250NB	1.00	No		
c	200NB	1.00	No		
d	100NB	1.00	No		
e	80NB	1.00	No		
19	Power Consumption	720000.00	KW		
	Note : Actual power consumption deducted from Contractor bill as per current rate of DAP				
			<b>Total for Part - A</b>		
<b>Seal &amp; Signature</b>				<b>Executive Engineer (H)</b>	
<b>of Contractor</b>				<b>Deendayal Port Authority</b>	

Item No.	Item Description	Qty.	Unit	Rate	Amount
<b>PART - B (ELECTRICAL WORK)</b>					
Item No.	Item Description	Qty.	Unit	Rate	Amount
1	LT Power Cable laying				
	Supply , laying of heavy duty medium voltage cables,1100 volts grade,Laying of cable in side the 200 mm. dia HDPE pipe (excluding laying of pipe) of will be below ground as per the direction of the site In charge. Minor cleanness if required must be scop of electrical contractor. (Clamping is the scope of electrical erection contrator where it is required) as per sepcification and IS 1554 part II,7098 XLPE insulated , PVC inner and outer sheated , stranded AL / CU conductor unless or otherwise specified. The cable shall be laid as per the specifications. The cable shall be laid with proper clamping arrangement when laid in specified manner. Providing of the requied hooks,pulley etc. to pull the cable in pulling pit is included in scope of work. The scope shall also included supply, fixing, connection , testing and commissioing of double compression brass cable glands with hood and crimping type Bimetallic lugs / sockets with necessary tools & equipments as specified in specification s & IS. The g;and and llugs / sockets shall be suitable for cable size and type mentioned above the job includes if necessary supply and The unit shall include				
	1) Connection of cable. Cable tagging is required at the both end of termination as weel as at every manhole.				

Item No.	Item Description	Qty.	Unit	Rate	Amount
	2) Supply and fixing of cable G I clamps (with GI screw.), Nylon tie, Brackets, supports, route markers etc. where ever required to fix the cables safely. Route markers to be provided at every 30m and at each diversions.				
	3) Earthing the glands and armouring with earthing clamp and jumper and also connecting to common earth bar.				
	4) Lifting of chamber cover, and close chamber cover at the respective place after cable laying.				
	5) Testing of insulation and continuity of cable and submission of reports to the clients.				
	6) Excavated & laying in cable in under ground.				
	7) Shifting of cable from site store to place of installation.				
	SITC of 3/5C x 300 Sq.mm AL.XLPE	973.00	Meter		
2	SITC of termination of LT Power cables using Comet make double compression glands, ferrules , gland hoods & Dowells make double compressiob IP-65 type lugs. All cables to be lugged irrespective of multi strand/Single strand (hoods are considered for supply).				
a)	SITC of 3.5C x 300 Sq.mm AL.XLPE	10.00	Nos.		
b)	SITC of 4 C x 10 Sq.mm AL.XLPE	3.00	Nos.		
3	SITC of 1.1kV , XLPE, armoured power cable straight thorough joint including joiting kit, jointing materials and all sundry materials to complete with testing & commisiionning (Raychem make)				
	SITC of 3.5C x 300 Sq.mm AL.XLPE	2.00	Nos.		

Item No.	Item Description	Qty.	Unit	Rate	Amount
4	PLUG SOCKETS FOR EQUIPEMENTS				
	SITC of 240 V 16 A industrial type mateclad socket with 16 A DP MCB with PVC backbox suitable for modular plate and other necessary accessories to complete the installation.	2.00	Nos.		
5	INTERNAL WIRING				
	Supply, installation, connection, testing & commissioning of following outlet points as per specification & IS. The unit rate for the point shall consist of the circuit wiring from LDB or switch board to outlet point through MCB / switch as required & including the outlet point switch connector & sockets. A point shall include in addition to the final termination at outlet points. All the wiring, outlet points shall be done in open wiring manner with ISI approved medium duty, rigid FR PVC, ISI conduit of minimum 25 mm. dia, with necessary bends, Tees, CLAMPS, BOLTS/screws, chains, pipes and deep junction boxes using 650 V FRLS copper conductor wire, industrial type, heavy duty switches with suitable plate, PVC back box with brass chromimum / cadmium plated machine screws etc.				
	Wire size for lighting circuit				
	1) Lighting circuit = 2 x 2.5 mm <sup>2</sup> (P+ N), 1 x 1.5 mm <sup>2</sup> ( E)				
	2) Power circuit = 2 x 4.0 sq mm (P+N), 1 x 2.5 sq mm (E)				
	3) Avg. circuit length from LDB to switch board 20 mtr.				
	4) Avg. circuit length from switch board to primary point 6 mtr.				
	5) Avg. circuit length from primary point to secondary point 3 mtr.				



Item No.	Item Description	Qty.	Unit	Rate	Amount
	6) Making of zari in wall using only electric cutter and finishing the surface as it was.				
	7) Earthing of fitting				
	8) Electrical connection to the fixture from the out let point / ceiling rose.				
	9) Supply and fixing of supporting frame, hardware and n/c tools and tackles etc for Exhaust fan.				
a)	Supply , laying , testing and commisssiong of the 3c x 2.5 sqm.mm. cu. XLPE, FRLS cable along with end termination , laid in the cable tray & along with structural member / wall / beam / 25 mm dia PVC conduit, then to be laid duly clapped as per requiremnet, cable tray & PVC conduite cost included.	410.00	Meter		
b)	Suppluy, Installation, Testing and Commissioning of PVC junction boxes of 100 x 100 x 100 mm size to be installed near each lighting fixture . The Eight way connector strip for the suitable size shall be installed in the junction box. The rate should include the box, connection strip and installation of the same near all the fixtures.	10.00	Nos.		
6	LIGHT FIXTURES, FAN EXHAUST FAN Cable tray - Supply and installation of FRP cable tray of 600mm wide x 100 mm height x 6 mm thickness	10.00	Meter		
7	Supply , laying , testing and commissioning of Cables : 1.1 KV Grade stranded Cu. Conductor, PVC insulated Armoured Cable including cable glands, lugs etc. (Cable to be laid in HDPE pipe excluduing cost of pipe) (a) 4 C x 6 Sq. mm. Copper armoured cable.	349.00	Meter		

Item No.	Item Description	Qty.	Unit	Rate	Amount
8	Supply , laying , testing and commissioning of Cables : 1.1 KV Grade stranded Cu. Conductor, PVC insulated Armoured Cable including cable glands, lugs etc. (Cable to be laid in HDPE pipe excluduing cost of pipe) (a) 4 C x 4 Sq. mm. Copper armoured cable.	1190.00	Meter		
9	Supply , laying, testing and commissioning of Cables : 1.1 KV Grade stranded Cu. Conductor, PVC insulated Armoured Cable including cable glands, lugs etc. (Cable to be laid in HDPE pipe excluduing cost of pipe) (a) 4 C x 1.5 Sq. mm. Copper armoured cable.	5410.00	Meter		
10	Supply, laying, testing and commissioning of Cables : 1.1 KV Grade stranded Cu. Conductor, PVC insulated Armoured Cable including cable glands, lugs etc. (Cable to be laid in HDPE pipe excluduing cost of pipe) (a) 4 C x 1.0 Sq. mm. Sheilded Copper control cable.	11035.00	Meter		
11	Supply, laying, testing and commissioning of Cables : 1.1 KV Grade stranded Cu. Conductor, PVC insulated Armoured Cable including cable glands, lugs etc. (Cable to be laid in HDPE pipe excluduing cost of pipe) (a) 3.5 C x 50 Sq. mm. Copper flexible cable.	120.00	Meter		

Item No.	Item Description	Qty.	Unit	Rate	Amount
12	Supply, laying, testing and commissioning of Cables : 1.1 KV Grade stranded Cu. Conductor, PVC insulated Armoured Cable including cable glands, lugs etc. (Cable to be laid in HDPE pipe excluding cost of pipe) (a) 3.5 C x 10 Sq. mm. Copper flexible cable.	40.00	Meter		
			<b>Total for Part - B</b>		
<b>Total for Part A + Part B in Rs.</b>					
<b>Seal &amp; Signature</b>				<b>Executive Engineer (E)</b>	
<b>of Contractor</b>				<b>Deendayal Port Authority</b>	