

Schedule B**Name of Work: Annual Maintenance Contract for Link Spans, pontoons and Terminal facilities at Hazira-Surat for 02 years**

Sr No.	Description of Items	Qty.	Rate		Unit	Amount
			In fig	In words		
1	Exavation for Foundation upto 1.5m depth including sorting out and stacking of useful materials and diposing of the exavated stuff upto 50 metre lead.					
		147.00	148.20		M ³	21785.00
2	Filling in plinth with sand under floors including watering, ramming consolidating and dressing etc.complete.					
		1.47	729.60		M ³	1073.00
3	Providing and Laying CC 1:4:8 (1 cement :4 coarse sand : 8 hand broken stone aggregate 40mm nomonal size) and curing complete excluding cost of form work in.					
		120.00	3201.80		M ³	384216.00
4	Providing and Laying Design mix Concrete M30 using minimum cement 365 kg/cum, crushed stone aggregates 20 mm nominal maximum size and curing etc complete excluding the cost of form work and reinforcement for reinforced concrete work in.					
		152.54	6359.10		M ³	970048.00
5	Providing and Laying Design mix Concrete M30 using minimum cement 365 kg/cum, crushed stone aggregates 20 mm nominal maximum size and finishing smooth with curing etc complete including cost of form work but					
(A)	Columns.					
		1.52	7668.20		M ³	11663.00
6	Providing,Throating or plaster drip and moulding to RCC Chhajja.					
		18.64	31.20		R.Mt.	582.00
7	Providing and Laying Design mix Concrete M30 using minimum cement 365 kg/cum, crushed stone aggregates 20 mm nominal maximum size and finishing smooth with curing etc complete including cost of form work but excluding the cost of reinforcement for reinforced concrete work in.					
		3.29	6640.20		M ³	21857.00

8	Providing and Laying Design mix Concrete M30 using minimum cement 365 kg/cum, crushed stone aggregates 20 mm nominal maximum size and finishing smooth with curing etc complete including cost of form work but excluding the cost of reinforcement for RCC work in.					
(A)	Slabs having more than 13 cm and upto 15 cm thickness.					
		26.25	6723.80		M ³	176467.00
9	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars of grade Fe-500					
		486.20	62.76		Kg	30514.00
10	Brick work using common burnt clay building bricks having crushing strength not less than 35kg/sq.cm in foundation and plinth in CM 1:6 (1 cement :6 Fine sand) Conventional bricks.					
		22.22	3844.90		M ³	85430.00
11	Brick work using common burnt clay building bricks having crushing strength not less than 35kg/sq.cm in superstructure above plinth level upto floor Two level in CM 1:6 (1 cement :6 Fine sand) Conventional bricks.					
		12.90	4059.60		M ³	52353.00
12	Providing and laying 15 to 20 mm thick for risers of steps, skirting and dedo of walls, pillars etc laid on 10 mm thick base of C.M (1:3) jointed with cement slurry including rubbing and polishing complete.					
		16.66	1781.80		M ²	29689.00
13	Providing and laying Polished Granamite Vitrified tiles of Size 600X600 mm and 8mm to 10mm thick of aproved make and colour having homogeneous materials in Flooring laid on 20 mm thick average cement mortar 1:3 (1 Cement : 3 Course sand) and pointed with white cement slurry.					
		168.24	683.70		M ²	115027.00
14	Providing and laying Polished Granamite Vitrified tiles of required Size and 8mm to 10mm thick of aproved make and colour having homogeneous materials in skirting, Dedo etc. on 10mm thick cement Plaster 1:3 (1 Cement : 3 Course sand) and pointed with white cement slurry.					
		5.42	754.90		M ²	4091.00

15	Providing and laying white glazed tiles 6 mm thick in skirting, risers of steps and Dado on 10 mm thick cement plaster 1:3(1 cement : 3 coarse sand) and jointed with white cement slurry.					
		33.61	1104.80		M²	37131.00
16	Providing and laying white glazed tiles 6 mm thick in Flooring, treads of steps and landing laid on a bed of 12 mm thick cement mortar 1:3(1 cement : 3 coarse sand) Finished with Flush pointing in white cement.					
		16.60	1057.00		M²	17546.00
17	Providing & laying polished kota stone slab 25 mm thick flooring over 20mm (average) thick base of cement mortar 1:6 (1 cement:5 coarse sand) laid over and jointed with grey cement slurry with including rubbing and polishing etc.complete.(all sides, machine cut, hand, dressed)					
(A)	25 mm thick.					
		16.20	887.90		M²	14384.00
18	Providing & laying polished kota stone slab 25 mm thick in risers of steps, dado and pillars laid on 10 mm thick cement mortar 1:3(1 cement::3 coarse sand) and jointed with grey cement slury including rubbing and polishing etc. complete.					
		1.80	939.70		M²	1691.00
19	Providing 15mm Thick cement plaster in single coat on wall for interior plastering upto floor two level finished even and smooth in cement mortar 1:3 (1 cement: 3 fine sand)					
		757.00	192.30		M²	145571.00
20	20 mm cement plaster in two coats with under layer 12mm in CM 1:3 (1 cement :3 coarse sand) and top layer 8mm in CM 1:3 (1 cement : 3 Coarse sand) finsh rough with sponge and curring etc.(for exterior plastering upto 10m height above G.L)					
		540.00	241.80		M²	130572.00
21	Providing and fixing anodised alluminium section two track windows with outer frame 61.5 mm X 31.5 mm of 19G, weighing 0.57 kg/m and shutter frame 34.5 mm X 15.80 mm of 19G, weighing 0.38 kg/m with all arengement for fixing, pvc weather strip, spring handles and other fixtures etc including fixing 4mm glass of approved quality as directed etc. complete.					
(A)	Doors/Window/Ventilator/Partition Window.					

		5.54	2668.00		M²	14772.00
22	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.					
		0.59	2809.35		M²	1643.00
23	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).					
(A)	Second class teak wood.					
		0.26	92103.87		M³	24077.00
24	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws					
	Terminal Building					
		10.86	1972.95		M²	21417.00
25	Providing, Fabrication and Fixing in position railing of stainless steel pipes in required sections as shown in drawing including cutting, welding, buffing and fixing in position etc. complete as approved model, Specification design and drawing including of all the taxes, VAT as per the prevalent rules, materials, transportation, erection of complete item as directed by EIC/Architect. Service Tax Shall be paid separately as per prevailing rules.					
	Approximate	2000.00				
		2000.00	505.00		Kg.	1010000.00
26	Providing & Fixing rolling shutters of approved make, made of 80 mm wide MS laths interlocked together through their entire length and jointed together at the ends by end locks mounted on specially designed pipe shaft, with bracket plates, guide channels and arrangements for inside and outside locking with push-pull operation including the cost of hood cover, spring and painted with red lead paint as priming coat.					
(A)	Shutters having width below 3.5 m.					
		30.00				

		30.00	3081.50		M²	92445.00
27	Providing and applying plaster of paris putty of average 2mm thickness over plastered surface to prepare the surface even and smooth.					
		90.80				
		90.80	135.10		M²	12267.00
28	Wall painting (two coats) with plastic emulsion paint of approved brand and manufacture on wall surface to give an even shade including priming coat thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.					
		757.00	74.90		M²	56699.00
29	Wall painting (two coats) with plastic emulsion paint of approved brand and manufacture on WALL surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.					
		540.00	74.90		M²	40446.00
30	Scrapping oil paint from steel and other metal surfaces and making the surface even (with hand scraping)					
		4513.00	36.40		M²	164273.00
31	Painting one coat (excluding priming coat) on previously painted steel and other metal surfaces with synthetic enamel paint, bushing to give an even shade including cleaning of all dirt, dust and other foreign matter.					
		4513.00	45.80		M²	206695.00
32	Painting one coat (excluding priming coat) on previously painted wood and wood based surfaces with enamel paint to give an even shade including cleaning of all dirt, dust and other foreign matter.					
		105.00	53.00		M²	5565.00
33	Providing & Applying Rubberised compound col tar pitch & epoxy base cold chemical compound corrosion protections lining materials of 2mm approx. on any parts of MS structure surface as Directed by EIC including cleaning of all dirt, dust and foregine matter etc. complete.Application shall be guaranteed of 5 years including cost of all tools, plants, and labours etc. complete					
		200.00	1300.00		M²	260000.00

34	Xypex or Equivalent fast setting cementitious crystalline repair mortar patch Nplug initial setting time of 3.50 minutes 9ASTM C 266) pull of bond strength 0.8 mpa (CSA A23.2-6B), compressive strength 31Mpa in 28 days (ASTM C 109), Tensile Bond 9CSA A23.2-6BMPA 0.8) working under flowing water in seconds and used to seal cracks and grooves.					
		200.00	550.00		R.Mt.	110000.00
35	Upkeeping the Area inside Hazira Terminal including open grounds, parking and inside compound wall and with approach by sweeping, collecting and removing dressing cutting the grass jungle weeds small unwanted trees, plants babools vegetation and removal of waste from dustbins.(All the work will be operated together) and disposed off from Hazira Terminal by tractor/trolley upto 13 KM lead or as directed by Engineer In Charge					
	(A) Hazira Terminal	208.00	8480.00		Time	1763840.00
36	C.P. Concealed cock 15 mm dia heavy duty with cap.					
		30.00	574.00		No.	17220.00
37	Providing and fixing C.P. Brass half turn flush cock of approved quality including fixing in pipe line complete.					
(A)	CP 20mm.					
	Approximate	30.00				
		30.00	338.20		Each	10146.00
(B)	CP 25mm.					
		30.00	348.60		Each	10458.00
38	Providing and Fixing Waste pipe for Wash basin					
(A)	32mm.					
		30.00	62.00		Each	1860.00
(B)	40mm.					
		30.00	82.00		Each	2460.00
39	Providing and fixing Gun metal check or non return full way Wheel valve.					
(A)	15mm.					
		20.00	216.90		Each	4338.00
(B)	20mm.					
		20.00	278.00		Each	5560.00
(C)	25mm.					
		20.00	530.70		Each	10614.00
(D)	32mm.					

		15.00	562.00		Each	8430.00
(E)	40mm.					
	Approximate	15.00				
		15.00	812.60		Each	12189.00
(F)	50mm.					
		10.00	1260.40		Each	12604.00
40	Extra Providing and Fixing.					
	Brass Stop Cock.					
(A)	15mm.					
		30.00	206.00		No	6180.00
(B)	20mm.					
		30.00	224.00		No	6720.00
41	PVC Flexible conection pipe 2' long.					
	Approximate	20.00				
		20.00	60.00		No	1200.00
42	Providing and fixing pillar tap capstan head screw down high pressure lettered "Hot" or "cold" with long screws, shanks and back nuts of following nominal bore.					
(A)	15mm.					
		50.00	400.80		Each	20040.00
(B)	20mm.					
		50.00	454.20		Each	22710.00
43	Providing and fixing wash down water closet (European type/Anglo indian type WC pan) with integral P or S trap including joining the trap with soil pipe in cement mortar 1:1(1cement : 1 fine sand)(seat and cover to be mesured and paid for seprately).					
(A)	Vitreous china.					
(i)	In white colour.					
		10.00	1129.50		Each	11295.00
44	Providing and fixing water closet, squatting pan (Indian type w.c. pan) size 580 mm (earth work, bed concrete foot rests and trap to be mesured and paid for seprately).					
(A)	Vitreous china.					
(i)	In white colour.					

		10.00	838.30		Each	8383.00
45	Providing and fixing PVC flushing tank 12.5 litre capacity of approved quality with all accessories including making inlet and outlet connection etc complete.(inlet and outlet pipe to be paid for separately).					
		10.00	1175.50		Each	11755.00
46	Providing and fixing (simpolo make) sculpture urinal white glazed urinal basin with white glazed vitreous china, 15 mm dia C.P. brass concealed stop cock with heavy quality C.P brass inlet connection of required length with brass union,washer and c.p.brass dome and spreaders with C.P brass union and clamps, haevy quality C.P. brass bottle trap and concealed connection 32mm dia G.I connected waste pipe with fitting upto the floor trap/including constructing channel above finished floor level with required brick work & p.c.c work complete including cutting and marking good the walls, RCC work and floor etc, wherever required complete as directed by EIC.					
		50.00	2607.00		Each	130350.00
47	Providing and Fixing wash basin with single hole for pillar tap with CI or MS Brackes painted white including cutting holes and making good the same but excluding fittings.					
(A)	Vitreous china.					
(i)	Flat back wash basin 550 x 400 mm size in white colour"					
		15.00	1202.10		Each	18032.00
48	Providing and fixing Rectangular mirror of Approved qualityand size 450mmX350mm With plastic moulded frame of approvrd make and shede with 6mm thock hard board backing.					
	Approximate	15.00				
		15.00	316.70		Each	4751.00
49	Providing and fixing C.P. brass shower rose with 15mm or 20 mm inlet.					
(A)	100mm.					
		15.00	326.00		No.	4890.00
50	Providing and fixng cast iron (spun) Nahni Trap of the folowing nominal diamerter of self cleansing design with C.I. scread down or hinged grating includingthe cost of cutting and making good the walls and floors 100 mm inlet and 50 mm outlet.					
		30.00	627.20		No.	18816.00

51	Providing & fixing S.W. Gully trap with C.I.grating brick masonry chamber & water tight C.I. Cover with frame of 300x300 mm size (inside) with standard weight.					
(A)	Square mouth trap 100mm x 100mm size P- type.					
		20.00	1385.50		Each	27710.00
52	Providing & Fixing hand shower Health faucet of a brass body with wall hook and 1.5m hose of Jaguar : ALD:579/Cera/Benelave or equivalent complete as directed by EIC.					
		20.00	1247.00		No.	24940.00
53	Construction of inspection chamber 90 cm x 60 cm up to 0.90 m depth 23 cm thick brick masonry in CM (1:5) (1 cement : 5 sand), Inside plaster 10mm thick in CM (1:3) with a floating coat of neat cement slurry and bed concrete 1:3:6, 10 cm thick excluding CI Airtight manhole cover and frame.					
		10.00	6044.30		No.	60443.00
54	Cement Concrete M30 grade of specified thickness in pavement using OPC 43 grade cement minimum @ 405 kg/cum and graded stone aggregates 25 mm nominal maximum size laid to required slope and camber in panels as required using appropriate batching and mixing plant, vibrating system comprising of needle vibrator, surface (screed) vibrator, floater etc, heavy duty steel form work made from MS channels including provision of contraction, expansion, construction and longitudinal joints, joint filler board, joint sealant, sealant primer, debonding strip, MS round dowel bar, tie rod all as per drawing and technical specifications, admixture (super plasticizer) conforming to IS:9103 @ 0.4 % by weight of cement, broom finishing, curing etc complete. (Reinforcement in form of dowel bars, tie rod etc to be paid for separately).					
		15.00	5108.40		M ³	76626.00
55	Providing and fixing precast cement concrete kerbs of M20 grade and sectional dimensions 150 mm x 300mm (150mm being width and 300 mm height) using table vibrated precast concrete units of approved size having one top edge champhered or rounded as per approved design including setting in position with cement mortar 1:3 (1 cement, 3 coarse sand) 50 mm thick bedding with necessary excavation, filling the joints with cement mortar 1:2 (1 cement, 2 fine sand), cost of moulds, finishing curing etc. complete.					
		70.00	401.70		R.Mt.	28119.00

56	Providing & fixing of Retro-reflectorized cautionary, mandatory and informatory sign boards upto 0.50 sqm area and any standard shape as per IRC:67 made of high intensity geade sheeting vide clause 801.3 of MORT &H specification fixed over aluminum sheeting 2mm thick supported on a mild steel angle iron post 75mm x 75mm x 6mm firmly fixied to the ground by means of properly designed foundation with M15 grade cement concrete 45cm x 45cm x 60 cm , 60 cm below ground level as per approved drawing. (including lettering and signs)					
		40.00	6196.70		Each	247868.00
57	Providing and Erecting direction and place identification Retro-reflectorized sign as per IRC:67 made of high intensity geade sheeting vide clause 801.3 of MORT &H specification fixed over aluminum sheeting 2mm thick with area not exceeding 0.9 sqm supported on a mild steel angle iron post 75mm x 75mm x 6mm firmly fixied to the ground by means of properly designed foundation with M15 grade cement concrete 45cm x 45cm x 60 cm , 60 cm below ground level as per approved drawing.					
		20.00				
		20.00	10213.90		M²	204278.00
58	Painting lines,dashes, arrows etc, on road in two coats with ready mixed marking paint confirming to IS :164 on bituminus surface ,including cleaning the surface of all dirt, dust and other foreign matter ,demarcation at site,traffic control etc.complete in all respects.					
		120.00	129.00		M²	15480.00
59	Providing and erecting a "W" metal beam crash barrier compresing of 3mm thick corrugated sheet metal beam rail, 70cm above road / ground level, fixed on ISMC series channel vertical post, 150X75X5 mm spaced 2 m centere to centere, 1.8 m high, 1.1 m below ground/road level, all steel parts and fitments to be Galvanised by hot dip process, all fittings to conform to IS: 1367 and IS: 1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150X75X5 mm, 330 mm long complete as per direction of Engineer In Charge.					
		70.00	3182.00		R.Mt.	222740.00
60	Providing and laying interlocking cement concrete paver blocks 100mm thick of M40 grade of approved make and shape including leveling the base with 50mm thick sand baddig, laying the paver blocks in pattern as directed by the EIC, filling the joints with sand including watering, rolling and comapcting with appropriate tools and plants, all conveyance including loading, unloading of blocks etc.complete in all respect.					

		1015.95	701.20		M²	712383.00
61	clearing the land by uprooting rank vegetation, grass bushes, shrubs, saplings, and trees with up to 300mm and disposal up to 1km, including all labour, tools & plants etc, complete.					
		42226.52	8.50		M²	358925.00
62	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.					
	CPVC Pipes.					
(A)	80 mm.					
		50.00	1393.28		R.Mt.	69664.00
(B)	100 mm.					
		50.00	1968.23		R.Mt.	98412.00
(C)	150 mm.					
		50.00	4109.88		R.Mt.	205494.00
63	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.					
A	15 mm nominal outer dia pipes.					
		150.00	179.13		R.Mt.	26870.00
B	20 mm nominal outer dia pipes.					
		250.00	227.57		R.Mt.	56893.00
C	25 mm nominal outer dia pipes.					
		150.00	285.99		R.Mt.	42899.00
D	40 mm nominal outer dia pipes.					
		100.00	472.05		R.Mt.	47205.00
E	50 mm nominal outer dia pipes.					
		50.00	648.90		R.Mt.	32445.00
64	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
(A)	250 mm dia. R.C.C. pipe.					
		50.00	567.81		R.Mt.	28391.00
(B)	300 mm dia. R.C.C. pipe.					
		50.00	631.44		R.Mt.	31572.00

65	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer -in -charge.					
(A)	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)					
		80.00	867.72		M³	69418.00
66	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.					
		60.00	2049.67		M³	122980.00
67	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.					
(A)	In cement mortar.					
		50.00	1188.92		M³	59446.00
68	Demolishing stone rubble masonry manually/ by mechanical means					
(A)	In cement mortar.					
		50.00	1418.97		M³	70949.00
69	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :					
(A)	Of area 3 sq. metres and below.					
		15.00	82.81		Each	1242.00
(B)	Of area beyond 3 sq. metres.					
		15.00	109.03		Each	1635.00
70	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.					
(A)	For thickness of tiles 10 mm to 25 mm.					
		100.00	42.35		M²	4235.00
(B)	For thickness of tiles above 25mm and up to 40mm.					
		100.00	65.38		M²	6538.00
71	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.					
		300.00	31.54		M²	9462.00
72	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting,unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50m initial lead, for all leads including all lifts involved.					
		500.00	153.55		M³	76775.00
73	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.					

		15876.61	3.26		Kg.	51757.75
74	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.					
	(A) All kind of soils	190000.00	19.71		One Square meter	3744900.00
75	Providing & Fixing of roller blinds on the windows with all necessary fixtures and all its accessories as per requirement and of approve color and make complete with all labour and material etc. as directed by engineer incharge.					
a	window size					
b	window size					
		4.48	2100.00		Say	9410.31
76	Maintenance of R.O.Plants of various capacities at i.e. Ro Ro Terminal Hazira Surat. Maintenance to be done atleast once in a month and in between if required at the time of any complain contractor has to get checked the plant thoroughly, including					
(i)	For 10 LPH capacity R.O.Plant (01 Nos.)	24.00	300.00		Months	7200.00
(ii)	For 250 LPH capacity R.O.Plant (03 Nos.)	72.00	700.00		Months	50400.00
77	Supplying and fixing spare parts of R.O.Plants of approved mark which includes cost of taxes etc. complete.					
	(A) 10 GPD Membrane	6.00	800.00		each	4800.00
	(B) 2500 GPD Membrane	6.00	9000.00		each	54000.00
	(C) High Pressure Pump 1.5 hp.	3.00	18000.00		each	54000.00
	(D) 25 NB Multi Port valve.	6.00	1750.00		each	10500.00
	(E) Vessle Recharging.	6.00	5150.00		each	30900.00
	(F) 20" Slim Bowl.	6.00	585.00		each	3510.00
	(G) 10" Jumbo Bowl.	6.00	600.00		each	3600.00
	(H) Water Level Sensor.	6.00	925.00		each	5550.00
	(I) 12/48 Vessle.	6.00	5250.00		each	31500.00
	(J) Booster Pump 24v DC 1.5A	6.00	1520.00		each	9120.00
	(K) Booster Pump 24v DC 2.5A	6.00	1740.00		each	10440.00
	(L) SMPS 24v DC 1.5A	6.00	450.00		each	2700.00
	(M) SMPS 24v DC 2.5A	6.00	530.00		each	3180.00
	(N) MS Cabinet.	2.00	5650.00		each	11300.00
78	Including removal of waste from dust bins placed at various locations including cleaning and sweeping of Termninal building, Canteen Driver, Rest room , Office room, Staff room security room DG room including Staircase steps railing landing passengers and corridors etc.	730.00	2052.08		day	1498017.26

79	Maintenance of steel Walkway (Link span) & gang way ladder anti skid paint & greasing of all the movable parts such as walkway rollers, hinges, plates and guide piles, guide plates, guide channels etc. including cleaning of walkway area and pontoon area. The work comprises also to check the water level inside Pontoons by opening and closing manhole cover & to submit the report of individual pontoon thereof etc. complete as directed by engineer in charge. The work includes the cost of oil, grease, tools & plants and labours as directed by the engineer in charge.	12.00	20000.00		1 Job Work	240000.00
80	Repairing of steel pontoons situated at Passenger jetty by welding the leakage holes developed during operation of pontoons with necessary thick steel plates, or by fixing the plates with necessary size of nut bolts, clamps, rubber gasket to stop the leakage of water inside the pontoon and to restore/bring	12.00	50000.00		1 Job Work	600000.00
81	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - I of ASTM-D 4956-01 in approved colour combination including subject matter, message/ symbols/letters of required size and borders etc., pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure and fixing the same with suitable sized aluminium alloy rivets on concrete/metaled surface including all leads and lifts etc. complete as per drawing, specification and direction of Engineer-in-charge	20.00	8000.00		1 M²	160000.00
82	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of oil dirt, scales, oil, grease and other foreign material etc. and lining out complete.	100.00	250.00		1 M²	25000.00
	(Two coats)					
83	Repair and maintainance of Bollards all as per design/type as shown in the drawing excluding the cost of bolts, nuts, washers etc. complete including two coats of paint over one coat of red lead paint.	40.00	10000.00		1 Job Work	400000.00
84	Repair and maintainance of anti-crash barrier railing including cost of M.S. angle and channels in vertical posts, riveting, welding / rivetting, priming painting two coats, at all heights labour and material as a complete job.	200.00	2500.00		m2	500000.00

85	<p>Repair and maintainance Aluminium Composite panel cladding including at all levels & framing as per the elevation, section and the plan drawings provided, fabricated out of heavy duty Aluminium extruded profiles conforming to alloy 643900 WP with chemical composition and mechanical properties as per IS-733 and as per specifications including the cost of scaffolding and other coincidentals. b) The contractor must design the cladding as per the prevalent site conditions and building elevations profiles. No extra claims shall be entertained at any stage for aluminum profile/ wall thickness and size dimensions. The Contractor must quote rates accordingly. c) The anchoring / bracing of the wall cladding to the RCC beams/ columns shall be done with non-corrosive galvanized brackets of approved design (Galvanizing to be done conforming to IS 4759-1996 up to 610 gms. Per Sq. M. (80- 90 micron thickness). d) The framework shall be aligned for the entire height of each Mullion and of the entire width of each Transform by laser beam equipment to ensure 100 percent , "X" axis and "Y" axis alignment. e) EPDM Gaskets of suitable profiles (to accommodate shall be provided including the labour element for fixing in appropriate locations is to be included in the rate). f) The Periphery of the framework shall be sealed both from inside and outside with silicon weather sealant to make the cladding watertight.</p>					
	<p>g) Cost of Aluminium composite panel consisting of a core of polyethylene sandwiched between two aluminium skins of 0.5 mm thickness with a mild edge. 4 mm total thickness with surface finish of PVDF coating as approved by the Engineer-in-charge, as shown in the elevation, plan and cross section drawings along with labour element for cutting stacking, carrying to heights and fixing to appropriate locations is included in the rates. h) All the vertical and horizontal section grooves are to be sealed non staining silicon sealant of make as specified in the list of approved make to make the entire system synchronies with the basic structural glazing/curtain wall structure and also make the system air tight and watertight. The fixing details should be got approved by the Engineer- in-charge. The peel off foil should be removed at the time of handing over as may be required by the Engineer-in-charge.</p>					

	I (i) ACP shall be as approved with high fiber filled sandwiched panel 4 mm installed on Aluminium framing and Galvanised brackets. Aluminium cladding panel to be PVDF fluorocarbon coated factory applied colours. Reverse side to be in mill finish. All the joints shall be sealed with silicon sealant of approved make. The colour of sealant to be decided by Engineer-in-Charge. ii) A sample of panels and installation methods to be submitted to the Engineer-in-Charge for approval. j) Manufacture i) The panels must be visually flat. Any stiffener applied to compensate for wind load must not read through. k) Installation i) The panels shall be fixed in accordance with manufacture's recommendations. ii) Technical Properties of Aluminium Composite Panels iii) All cladding shall be of 4.0 mm thick aluminium composite panel comprising of high mineral filled core sandwiched between two skins of aluminium alloy. 1. Mechanical Properties : Tensile strength >130 N / mm ² : 0.2 % proof stress 90 N / mm ² : Elongation 5 % : Modulus of elasticity 70,000 N/mm ² 2. Vibration and Noise :Average airborne-Sound Damping Transmission loss R/N 25db (DIN 4109) 3. Thermal Transmittance"s: 0.014 m ² °C/W 4. Moment of Inertia :0.347 cm ⁴ /m 5. Panel Weight :5.5 Kg/m ² 6. Finish :PVDF stove lacquered (Fluoro carbon) on one side and reverse side in mill finish. 7. Colour :Colour to be selected by Engineer-in-Charge Representative using standard PVDF colour chart from manufacturer					
		300.00	2700.00		M2	810000.00
86	Specifications to be same as item number 119 but for providing and fixing ACP having wooden shades with 4 mm thickness full (Through) of approved shade and make so as to achieve desired design pattern					
		300.00	3500.00		M2	1050000.00
87	Repair, maintainance and erecting fully glazed frameless glass door made out of 12 mm thick toughened glass with pencil polish edges all around. Door shall be fixed with double leaf (2.5ft each) at main entrance & the top edge	10.00	4000.00		M2	40000.00
88	Providing & fixing of artefacts ex. paintings,flower vase,wall pieces,doormat,carpet/rugs etc are placed/fixed in tumbler, bucket, mirror of size 3'x3', vending machine for sanitary napkins, automatic hand dryer machine, dustbins, tissue papper roll holder, roll etc.as directed by Engineer-in -charge	50.00	2000.00		each	100000.00
89	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					
	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30					
	Considering 10% of Total Qty.					

		450.00	1860.67		cum	837301.50
90	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					
		300.00	1962.56		cum	588768.00
91	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer In Charge.					
	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100- 120 TPH capacity.					
	1125cum @ 2.30 tonne/m3					
		258.75	7009.31		tonne	1813658.96
92	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom.					
A	On W.B.M / W.M.M. @ 0.4kg/sqm					
		150.00	8.12		sqm	1218.00
B	On bituminous surface @ 0.25kg/sqm					
		150.00	5.53		sqm	829.50
93	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.					
	40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.					
		180.00	7609.53		tonne	1369715.40

94	Maintenance of main garden at RO Ro Terminal Surat (main garden) is front of Terminal building. in RO Ro Terminal Surat including Lawn, Hedges, Ornaments plants and Seasonal Flower, Mehendi Plants, cleaning of walk paths, cutting and giving proper shape to mehendi and other plants and trees. etc. which including keeping surrounding cleaned from unnecessary grass, shrubs, etc. shall be removed regularly and soil made loose periodically and cutting lawns and hedges time to time and healthy development of plants and trees watering, manuring the plants hedges and lawns as per requirement etc. Including hire charges of tractor with trolley including wages of driver, cleaner complete as directed by engineer-in-charge (excluding the cost of water.)					
(A)	RO Ro Terminal Surat for front side garden 24 month	24.00	80562.39		month	1933497.00
95	Supplying and fixing at site precast RCC compound wall (prestressed) of grade M 30, with columns of size 15cmX15cm prestressed with minimum 7 nos of 3mm dia steel wires and 244cm (8 feet) length, fixed in foundation concrete of size 60X60X60cm below ground level, 60cm column length to be embedded in foundation concrete and remaining 184cm (6 feet) length above ground level, including providing and fixing panels of size 213X30X5 cm (7' X 1' X 2") prestressed with minimum four nos of 3mm dia steel wires including all labour, machinery, lead and lift etc. complete.	900.00	1533.00		m	1379700.00
96	Providing and fixing Concertina with punched tape concertina coil 600 mm dia 10meter openable length (total length 90m) having 50 nos rounds per 6 meters length, upto 3 m height of wall with existing angle iron "Y" shaped placed 2.4 m or 3.0 m apart and with 9 horizontal R Bt reinforced barbed wire, stud tied with G I staples & GI clips to retain horizontal, including necessary bolts or G I barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape (R B T) / Spring core (2.5 mm thick) wire of high tensile strength of 165kg/ sq.mm with tape (0/52 mm thick) and weight 43.478 gm/metre (cost of M S angle, CC block shall be paid separately.)	900.00	269.00		Rmt	242100.00
97	Manufacture and Supply of "CELL" type fenders of size 800 H, weighing approximately 400 kgs at site and installing the same on dock wall at all levels upto low water as shown in the drawing or as directed including cost of all materials, SS (nonmagnetic) anchor bolts of size 32 mm, transportation, testing of materials, drilling of hole, anchoring fixtures using mechanical/chemical anchors as per design etc. Complete.	5.00	126334.00		Each	631670.00
		TOTAL : FOR WORK AT HAZIRA (PART I) = Rs.				27759110.68
		Add 1.5% Contingencies = Rs.				416387.00

						416387.00
		TOTAL : FOR WORK AT HAZIRA (PART I) = Rs.				27759110.68
			Say, Rs.			27759111.00

PART II - ELECTRICAL ITEMS OF HAZIRA AMC

1	Deployment of electrical staffs on 24 hrs x 7 days basis including, Sunday and holidays as mentioned in the scope of work along with two wheeler vehicle, cell phone at the site as per the schedule attached.	24	144770		month	3474480.00
2	Maintenance/Breakdown/Maintenance with replacement of parts/materials of HT & LT installation including lighting system as shown in the scope of the work. Bidders are directed to fill up the rates of PART-B, based on which 24 Month materials will be consumed as per the site requirement, However, bringing of materials shall be prior to approval of EIC.(As and when required).	24	40000		month	960000.00
	HT 11Kv Materials and aerosols					
1	Epoxy Insulator for HT Panel	02 No.	300		No.	6000
2	Panel Indication Lamp	05 No.	45		No.	225
3	Bus Bar Heat shrink tape(9m x 25mm) OR Higher	05 No.	1000		No.	5000
4	Bus Bar Spout for Isolator	03 No.	2000		No.	6000
5	11KV Anti tracking Spray(250ml and above)	03 Tin	1500		Tin	4500
6	Contact Cleaner(250ml and above)	10 Tin	750		Tin	7500
7	Panel Control Fuses(2A to 16A)	20 No.	70		No.	1400
8	11KV Indoor end termination kit upto 3Cx150sqmm Aluminium XLPE Cable	02 No.	8000		No.	16000
9	11KV Outdoor end termination kit upto 3Cx150sqmm Aluminium XLPE Cable	04 No.	1000		No.	4000
10	Isolator Fuses for 12 KV Indoor Type	20 No.	700		No.	14000
11	Spares for Silent Generator of 250KVA Cooper Corp.Quantity - 01					
11a	Air Filter As per original	02 No.	3000		No.	6000
11b	Oil Filter As per original	02 No.	2500		No.	5000
11c	Coolant	10 ltr.	100		ltr.	1000
11d	DG Battery 24v, 150AH	04 No.	14000		No.	56000
11e	Battery Cable with Lug	02 Set	600		Set	1200
11f	Engine Starter overhauling	02 No.	1800		No.	3600
11g	Kirloskar Engine Oil	100 ltr.	180		ltr.	18000
11h	Fuel line nitrile rubber	05 mtr	60		mtr	300
12	Spares for APFC Panel 50KVAR					
12a	Master Controller	01 No.	11500		No.	11500
12b	20KVAR Capacitor	01 No.	12000		No.	12000
12c	10KVAR Capacitor	01 No.	4050		No.	4050
12d	3-Phase 20KVAR Capacitor Contactor	01 No.	4000		No.	4000
12e	Capacitor Contactor Coil	01 No.	1400		No.	1400

12f	HRC Fuses	03 No.	230		No.	690
13	Spares for Compact Substation Distribution Transformer 11KV/0.433KV, 315KVA ONAN					
13a	HT Bushing Packing	02 No.	1800		No.	3600
13b	LT Bushing Packing	02 No.	900		No.	1800
13c	Transformer Oil	50 ltr.	80		ltr.	4000
13d	Silica Gel	02 KG	200		KG	400
13e	Breather As per original	01 No.	1800		No.	1800
13f	Transformer Gasket of rubber cork sheet As per original measurement	01 No.	3500		No.	3500
13g	Temperature Gauge	NA			NA	
14	Spares for Distribution LT Panel 11Ways					
14a	DIN HRC fuse 160A 415V AC Size 00	03 No.	400		No.	1200
14b	DIN HRC fuse 100A 415V AC Size 00	03 No.	378		No.	1134
14c	DIN HRC fuse 63A 415V AC Size 00	03 No.	366		No.	1098
14d	SFU 415V 50Hz AC 200A TP Panel Mounting Type	01 No.	7710		No.	7710
14e	SFU 415V 50Hz AC 400A TP Panel Mounting Type	01 No.	13530		No.	13530
14f	Panel Type Voltmeter 0 to 500V	01 No.	400		No.	400
14g	Panel Type Ampmeter 0 to 1000A	01 No.	510		No.	510
14h	Voltmeter Selector Switch	02 No.	200		No.	400
14i	Panel Indication Lamp	06 No.	170		No.	1020
14j	MCCB C Curve 200A, 415V, 50Hz AC	01 No.	12500		No.	12500
14k	MCCB C Curve 100A, 415V, 50Hz AC	01 No.	6000		No.	6000
14l	MCCB C Curve 400A, 50Ka, 415V, 50Hz AC	01 No.	27000		No.	27000
14m	MCCB C Curve 250A, 50Ka, 415V, 50Hz AC	01 No.	16000		No.	16000
General Electrical items which are to be removed from site and to install the						
1	Single Pole MCB 16A C Curve	05 No.	376		No.	1880
2	Two Pole MCB 32A C Curve	05 No.	1225		No.	6125
3	Four Pole MCB 40A C Curve legrand	05 No.	3802		No.	19010
4	RCCB Four Pole 63A, 100mA	05 No.	8622		No.	43110
5	Hensel JB 17 inch x 11 inch with hinge & Cover having push button selector switch & ON/OFF indication	03 No.	2500		No.	7500
6	Hensel JB with conector for 10 to 16 sqmm type with model DK 3535G	10 No.	2400		No.	24000
7	Astronomical Timer	05 No.	1800		No.	9000
8	Three Phase Contactor 60A	05 No.	4000		No.	20000
9	Puff seal tin 250ml and above	20 No.	400		No.	8000
10	PVC Tape in RYBB Color 1.80cmx7mx0.125mm	50 No.	15		No.	750
11	LED Street Light 70W Metal Housing	50 No.	2900		No.	145000
12	LED Flood light 100W Metal Housing	20 No.	3500		No.	70000
13	Swaged pole 6 meter size with JB and LED Street light 70W	15No.	10500		No.	157500
14	Wall Mounting Fan 400mm s weep	05 No.	2000		No.	10000
15	Industrial Fan 24inch rewinding	10 No.	5000		No.	50000
16	Exhaust fan 230mm rewinding	05 No.	2000		No.	10000
17	Stainless steel screw of diff. sizes	10KG	500		KG	5000
18	Stainless steel Hardware	10 KG	700		KG	7000

19	2.5SQMM 3C Copper stranded flexible wire	100mtr	60		mtr	6000
20	New Earth Station with 3 mtr pipe in pipe GI 48mm and 76mm	05 No.	10000		No.	50000
21	Lug 6sqmm to 50sqmm	10 KG.	600		KG.	6000
22	Silver Paint	30 ltr	300		ltr	9000
23	Surge protection three pole	20 No.	2400		No.	48000
24	Driver LED light 70W	20 No.	250		No.	5000
25	150W LED metal body fixture outdoor type	05 No.	4500		No.	22500
26	Two Module Fan Regulator	10 No.	350		No.	3500
27	SP 1 Module Switch	10 No.	170		No.	1700
28	6A Socket modular type 3 pin	10 No.	254		No.	2540
29	Four Feet LED tube Light 22W and above	40 No.	250		No.	10000
30	Four feet LED tube light 40W and above	40 No.	500		No.	20000
			Total PART II			4434480.00
			Total PART (I + II)			32193590.68

I/ We am/are willing to carry out this work at _____ % above/ below (percentage should be written in figure and words).

Estimated amount put to tender Rs. _____

Deduct _____ % below(-) Rs. _____

Net Rs. _____

In words (Rupees _____)

Contractor

Dy Chief Engineer (Ro Ro)
Deendayal Port Authority