

-: BILL OF QUANTITY :-

Name of Work :- Maintenance contract for quay and transit area inside cargo jetty area for two years

Sr. No.	Description of Item	Qty.	Rate		Unit		Amount
			In Fig. (Rs.)	In Words	In Fig.	In Words	
1	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 5 kilometre, stacking serviceable and unserviceable material separately including cutting reinforcement bars.	140.00	2,203.22	Rs. Two thousand two hundred three and twenty two paise	1 M ³	One Cubic Meter	308451.00
2	Demolishing C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 5 kilometre, stacking serviceable and unserviceable material separately.	200.00	1558.52	Rs. One thousand five hundred fifty eight and fifty two paise.	1 M ³	One Cubic Meter	311704.00
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :						
A	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	50.00	4428.24	Rs. Four thousand four hundred twenty eight and twenty four paise	1 M ³	One Cubic Meter	221412.00
B	1:1½:3 (1 Cement: 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	300.00	5448.56	Rs. Five thousand four hundred forty eight and fifty six paise	1 M ³	One Cubic Meter	1634568.00
4	Providing and laying in position specified grade of reinforced cement concrete, including the cost of centering, shuttering, finishing - All work up to plinth level :. (Rate is exclusive of cost of reinforcement). 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).. (A) For protection wall and copings	400.00	8198.39	Rs. Eight Thousand One Hundred Ninety Eight and thirty nine paise	1 M ³	One Cubic Meter	3279356.00
B	For beams and cantilevers	15.00	8695.36	Rs. Eight Thousand Six Hundred Ninty Five and thirty six paise	1 M ³	One Cubic Meter	130430.00
5	Providing and laying reinforced cement concrete mix 1:1-1/2:3 consisting of ingredients of cement, sand and crushed graded trap stone metal including mixing, placing, vibrating, levelling, curing, necessary formwork, scaffolding etc. complete for slab. The shuttering work for slab is to be done under tidal condition and the rates inclusive the cost of shuttering, hiring of jolly boat, floating craft etc., complete as directed.	100.00	8825.27	Rs. Eight Thousand Eight Hundred Twenty Five and twenty seven paise	1 M ³	One Cubic Meter	882527.00
6	Providing, laying & fixing in position upto 2km. lead reinforced cement concrete of mix 1:1-1/2:3 precast RCC slab consisting of sand cement and crushed graded trap stone metal including mixing, depositing, vibrating, levelling & curing in raft including cost of necessary formwork as directed (Rate is exclusive cost of reinforcement).	20.00	6935.38	Rs. Six Thousand Nine Hundred Thirty Five and Thirty eight paise	1 M ³	One Cubic Meter	138708.00
7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.						

A	Thermo-Mechanically Treated bars of grade Fe-500D or more.	65500.00	62.76	Rs.Sixty Two and seventy six paise	1 Kg.	One Kilogram	4110780.00
8	Providing & laying cement concrete solid blocks 1:8:6 (machine made) confirming to relevant IS (Latest Edition) masonry 200mm thick set in cement mortar 1:6 including curing etc. complete as directed. (A) In plinth / foundations/ super structure	70.00	3668.60	Rs.Three Thousand six hundred sixty eight and Sixty paise	1 M ³	One Cubic Meter	256802.00
9	Plastering with cement mortar 1:4 scrubbing & cleaning, finishing smooth curing etc. complete. For interior/exterior plastering upto floor two level.						
(A)	12 mm thick (with raking out joints)	1200.00	215.08	Rs.Two Hundred Fifteen and eight paise	1 M ²	One Square Meter	258096.00
10	Supply of Machineries as directed by Engineer-in-charge. (A) Hire charges for Hydra of loading capacity up to 5 M.T. including wages for driver cleaner and cost of fuel.	250.00	800.00	Rs. Eight Hundred	1 Hour	One Hour	200000.00
B	JCB of loading capacity of 0.50 to 1.0 m3 including wages for driver, cleaner and cost of fuel.	250.00	800.00	Rs. Eight Hundred	1 Hour	One Hour	200000.00
11	Fabricating including supplying and erecting steel structure including, hoisting, fixing, bolted and cutting to required length and shape, drilling holes, jointing in an approved manner etc. complete as directed. (Steel will be given free of cost)	1000.00	15.15	Rs.Fifteen and fifteen paise	1 Kg.	One Kilogram	15150.00
12	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	5000.00	78.37	Rs.Seventy Eight and thirty seven paise	1 Kg.	One Kilogram	391850.00
13	Fabricating including supplying and erecting steel structure including, hoisting, fixing, bolted and cutting to required length and shape, drilling holes, jointing in an approved manner etc. complete as directed. (Work to be done under tidal conditions)	5000.00	88.97	Rs.Eighty Eight and ninety seven paise	1 Kg.	One Kilogram	444850.00
14	Supply of Tractor with trolley of loading capacity 5M.T along with tractor driver and four labours for loading unloading and other miscellaneous work including the cost of fuel, for 8 hours day.	250.00	3540.18	Rs.Three Thousand Five Hundred Forty and Eighteen paise	1 Day	One Day	885045.00
15	Opening of choked drain holes from underneath of wharf and transist area by removing of choked material with help of crow bar , hammer, G I Pipes etc complete including cost of all labour etc complete as directed by engineer-in-charge. (Work is to be done under tidal conditions)	2000.00	181.22	Rs.One Hundred Eighty One and twenty two paise	Each	Each	362440.00
16	Making of drain holes of 100mm dia. and 400mm to 800mm depth by core cutter machine at wharf area as directed by engineer - in - charge. The work including all tools, plants, labours and machinaries requires for making the holes.	50.00	1271.38	Rs.One Thousand two hundred seventy one and thirty eight	Each	Each	63569.00
17	Rough stone pitching with trap stones (minimum 150mm thick) set in cement mortar 1:6 for toe walls & revetment as per profile including curing etc. complete as directed. (under tidal conditions)	100.00	5397.80	Rs.Five Thousand three hundred ninety seven and eighty paise	1 M ³	One Cubic Meter	539780.00
18	Applying one coat by brushing SBR Latex mixed with Cement in the ratio of 1:1.5 by volume as a bonding coat over existing slab/ balconies/ chajjas etc., after cleaning the surface free of all dust and loose material and wetting the same as per the manufacturers instructions.	3000.00	125.00	Rs.One Hundred twenty five	1 M ²	One Square Meter	375000.00

19	Welding electrically or by any other method MS plates, R.S. joists, Tees, channels etc. up to a thickness of 10cm. including cost of electrodes charges for welding set etc. complete as directed. (A) Up to 10cm. Thickness (including steel reinforcement also)	15000.00	2.38	Rs.Two and thirty eight paise	1 Cm.	One Centimeter	35700.00
20	Day to Day (Round the Clock) inspection of wharf area and fender blocks while berthing/sailing/shifting and stay period of vessel. The work comprises of to take the berthing/sailing/shifting chart of vessel from the signal station of deendayal port trust, keep the up-to-date record of movement of vessels in the prescribed format given by Engineer and to keep informed concerned engineer about day to day supervision activities carried out in writing as well as verbally. The engaged personnel is also responsible to hand over the Damage Memo to Traffic Department/Signal station and Marine Department timely for fixing responsibility of damage if any occurs as and when directed by concerned Engineer of work. He has to carry out the inspections at regular interval daily in the area from 0(zero) panel to 16(sixteen) cargo berths, Passenger jetties, Craft jetties and Bunder basin area and wherever directed by concerned Engineer of work for inspection and noticing the damages if any. The contractor has to strictly monitoring the damage occurs to wharf area and fender blocks while berthing/sailing/shifting and stay period of vessel. (If any damage found un-noticed due to the negligence/lapse from contractor side, the assessed cost of the same damage will be recovered from the R.A. Bills of contractor. The transportation for inspection and communication (mobile connectivity) facilities to the engaged personnels should be provided by the contractor.	730.00	4686.53	Rs. Four Thousand six hundred eighty six and fifty three paise	1 Day	One Day	3421167.00
21	Rebarring of following various dia. Bars in existing R.C.C. beam and slab including approved chemical, making appropriate hole, cleaning, scaffolding, all labour and materials as directed by Engineer incharge. (A) 10mm dia. Bars	50.00	325.00	Rs.Three Hundred twenty five	1 No.	One Number	16250.00
B	12mm dia. Bars	200.00	350.00	Rs.Three Hundred fifty	1 No.	One Number	70000.00
C	16mm dia. Bars	200.00	400.00	Rs.Four Hundred	1 No.	One Number	80000.00
D	20mm dia. Bars	50.00	500.00	Rs.Five Hundred	1 No.	One Number	25000.00
22	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 all dirt, scales, oil, grease and other foreign material etc. and lining out complete.						
A	New work (Two coats)	1200.00	110.95	Rs.One Hundred Ten and ninety five paise	1 M ²	One Square Meter	133140.00

23	Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	800.00	436.66	Rs.Four Hundred thirty six and sixty six paise	1 M ²	One Square Meter	349328.00
24	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :						
A	Two or more coats on new work	300.00	96.50	Rs.Ninety Six and fifty paise	1 M ²	One Square Meter	28950.00
25	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :						
A	Two or more coats on new work/old work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	2500.00	243.81	Rs.Two Hundred Forty Three and Eighty One paise	1 M ²	One Square Meter	609525.00
26	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :						
A	Two or more coats on new work/old work	300.00	80.57	Rs.Eighty and fifty seven paise	1 M ²	One Square Meter	24171.00
27	Finishing walls with Acrylic Smooth exterior paint of required shade:						
A	New work/old work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	800.00	116.80	Sixteen and eighty paise	1 M ²	One Square Meter	93440.00
28	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	35.00	3926.69	Rs.Three Thousand Nine Hundred Twenty Six and sixty nine paise	1 M ²	One Square Meter	137434.00
29	Repairing of steel pontoons of various sizes situated at Passenger jetty, flotilla jetty, SNA 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 the pontoon in original position, including dewatering the water from pontoon, complete with all labour and material as directed by Engineer in Charge.The work also involves providing necessary equipments/machineries for carrying out repairing work.	10.00	20000.00	Rs.Twenty Thousand	1 Job	One Job	200000.00

30	Maintenance of steel Pontoons and Walkway by oiling & 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.	2912.00	499.88	Rs.Four Hundred Ninety Nine and eighty eight paise	1 No	each	1455651.00
31	Chipping and removal of dilapidated concrete from RCC structural members carefully by suitable means upto sound concrete using electrically operated low impact concrete chipper (where use of electrical chipper is not feasible chisel & hammer may be permitted with great care and under supervision). including cutting/Removal of liner, cutting the excessively corroded reinforcement wherever directed, cleaning the chipped surface with wire brush, providing and applying rust covering primer. complete as specified & as directed including necessary scaffolding. Removing/disposing or stacking the salvages etc. Complete as specified & as directed by EIC.	100.00	400.00	Rs.Four Hundred	1 M2	One Square Meter	40000.00
32	Providing and fixing shear connectors supplying, fabricating and fixing HYSD TMT minimum Fe 500D grade rods of 12 mm dia of min 250mm long to be placed in position in 14 mm dia in 150 mm depth hole, as shear connectors / anchor rods, including supplying, mixing, drilling and filling the gap around the rods with anchor resin RE10 or equivalent. Complete as specified & as directed by EIC.	350.00	200.00	Rs.Two Hundred	1 No.	One Number	70000.00
33	Anti corrosive coat : Supply and apply of Anticorrosive Zinc primer coating to the new and existing reinforcement after removing the rust and scales by mechanically to prevent the rebars from corrosion activity as specified and completion as directed by EIC.	500.00	300.00	Rs.Three Hundred	1 Kg.	One Kilogram	150000.00
34	Providing and laying cement based pre packed non shrink free flowing Micro concrete with ratio of 1:1 (Cement and 12mm chip) including water tight shuttering etc., complete. As specified and as directed by EIC (Manufactured by M/S BASF, M/S FOSROC, M/S PIDILITE or any equivalent supplier).	10.00	40000.00	Rs.Forty Thousand	1 M3	One Cubic Meter	400000.00
35	The Acrylic emulsion cement modified and water based concrete Curing Membrane (such as MasterKure 185 or equivalent) and Applng immediately after the concrete gets finished, the membrane shall be sprayed over the concrete finished area without any gap or pinhole. The cost of all materials, tools and all labour charges etc. are included., completion as specified and as directed by the Engineer-In-Charge.	100.00	275.00	Rs.Two Hundred Seventy Five	1 M2	One Square Meter	27500.00
36	Providing and applying protective coating MasterProtect 300- Aliphatic Acrylic protective and waterproof coating after proper surface preparation, cleaning of dust, dirt etc. System should be application of MasterSeal 399 Primer- Water based acrylic primer on prepared surface and application of 2 coats of MasterProtect 300 or equivalent at suitable brush or roller, completion as specified and as directed by the Engineer-In-Charge.	100.00	500.00	Rs.Five Hundred	1 M2	One Square Meter	50000.00

37	Providing 10 mm to 20mm thick flooring with free flow, high strength, non shrink cementitious precision grout over existing RCC/CC surface including preparation/cleaning of existing surface, applying the grout as per manufacturer recommendations etc complete with all material and labour as directed by Engineer in charge.	480.00	1783.31	Rs.One Thousand Seven Hundred Eighty Three and thirty one paise	1 M2	One Square Meter	855989.00
38	Providing and fixing wooden planks made from secondary hard wood as approved by Engineer in charge including cutting wood in required size and length, removing old wooden planks from site, fixing the new wooden planks in position including drilling holes , providing necessary self drilling screws for fixing wooden planks in position complete with all labour and material as directed by Engineer in charge.	3.00	75247.20	Rs. Seventy five Thousand Two hundred forty seven and twenty paise	1 M3	One Cubic Meter	225742.00
39	Applying one coat of Epoxy primer over new/ old steel and other metal surface over 10 cm in width or girth after and including preparing the surface by thoroughly cleaning oil, grease, dust and other foreign matter and scoured with wire brushes, fine steel wool, scraper and sand paper complete as directed by Engineer in charge	1000.00	45.57	Rs.Forty Five and fifty seven paise	1 M2	One Square Meter	45570.00
40	Painting two coats (excluding priming coat) on new/old steel metaled surfaces with epoxy paint. Brushing exterior typr I to give an even shade including cleaning the surface of all dirt / dust & other foreign matter on surface over 10cm in width /girth.	1000.00	93.43	Rs.Ninety Three and forty three paise	1 M2	One Square Meter	93430.00
						TOTAL = Rs.	23648505.00

I / We am/are willing to carry out this work at _____% above / below (percentage should be written in figure and words). The tendered rates mentioned above amount of my / our tender are put as under :-

Estimated amount put to tender Rs. _____
Deduct _____% below (-) Rs. _____
Net Rs. _____
In words (Rupees _____)
_____)

Estimated amount put to tender Rs. _____
Add _____% above (+) Rs. _____
Total Rs. _____
In words (Rupees _____)
_____)

Contractor

Executive Engineer (H)
Deendayal Port Authority