

COCHIN PORT AUTHORITY

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Tender No: T14/T-1965/2022-C

Name of Work: Construction of Jetty and Associated Facilities for handling Ro-Ro ships at Cochin Port

PRICE BID-SCHEDULE – “II”- SCHEDULE OF QUANTITIES OF WORK TO BE DONE ON CONTRACT

Name of The Bidder

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
A	Part:A - Construction of Jetty of size 15 x 8m over bored cast-in-situ piles						
1	Fabricating and supplying Mild Steel (MS) Liners at a suitable fabrication yard for bored cast-in-situ piles of 1,000mm dia. piles in backwater to the required length (approx..length 20m) using 6mm thick plate, including cost of all materials, labour, cutting, rolling, welding etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	15.30	T	1,23,390.00	Rupees One Lakh Twenty Three Thousand Three Hundred Ninety Only	18,87,867.00	<i>Rupees Eighteen Lakh Eighty Seven Thousand Eight Hundred Sixty Seven Only</i>
2	Transporting the fabricated MS liners fabricated as per item No.1 above from the fabrication yard to pile location, handling, pitching and driving the MS liners to required level and verticality including setting piling rigs/ gantry in position, temporary works for driving piles etc. complete all as per drawings, detailed specifications and directions of Engineer-in-charge.	6.00	Nos.	31,740.00	Rupees Thirty One Thousand Seven Hundred Forty Only	1,90,440.00	<i>Rupees One Lakh Ninety Thousand Four Hundred Forty Only</i>
3	Marine boring through all types of soils, viz gravel, clay, stiff clay, cemented clay, sand, weathered soft rock, leanmix concrete and boulders / rubble layer etc. (except soft and hard rock) for 1,000mm dia. vertical piles upto (-) 60m depth including mobilisation/ demobilisation of all plants and equipments, retaining of sides with bentonite slurry or polymer solutions and cleaning the bore holes, cost of all materials, labour, plants, equipments etc., including disposing of bored muck at a suitable dumping area, taking SPT values at founding level etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge. (only length below existing bed level will be measured and paid for.)	252.00	m	20,130.00	Rupees Twenty Thousand One Hundred Thirty Only	50,72,760.00	<i>Rupees Fifty Lakh Seventy Two Thousand Seven Hundred Sixty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
4	Providing and laying Reinforced cement concrete of M40 grade in-situ by standard method of placing by tremie pipe inside the Pile bore including cost of all materials, labour, all sampling and testing/ recording, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures, etc. complete but <u>excluding reinforcement work</u> as per drawings, detailed specifications and directions of Engineer-in-charge. [Only concrete quantity between founding level and 90cm above specified Pile cut off level will be measured & paid for].	225.00	m3	15,000.00	Rupees Fifteen Thousand Only	33,75,000.00	<i>Rupees Thirty Three Lakh Seventy Five Thousand Only</i>
5	Providing and placing in position reinforcement in cages inside the marine pile bore using TMT/CRS/ HYSD bars of Fe550/ Fe500 / Fe415 grade including cost of all materials, labour, transporting to site, cutting, bending, welding, lapping, tying, binding, fabricating into cages, installing in position, providing cover blocks, hire charges of all equipment, machinery etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge. (The reinforcement bars, authorised laps, lifting hooks, development lengths, dowels for superstructure etc. as per approved barbending schedule, will be measured & paid for)	36.00	T	1,40,000.00	Rupees One Lakh Forty Thousand Only	50,40,000.00	<i>Rupees Fifty Lakh Forty Thousand Only</i>
6	Chipping the concrete from the top of marine piles of 1,000mm dia. upto cutoff level, exposing the reinforcement, dressing pile head and disposing off the dismantled materials at suitable locations as per the directions of the Engineer-in-charge and levelling including hire charges of all equipment, machinery, labour, consumables etc. complete.	5.00	m3	9,740.00	Rupees Nine Thousand Seven Hundred Forty Only	48,700.00	<i>Rupees Forty Eight Thousand Seven Hundred Only</i>
7	Mobilizing, arranging and carrying out low strain pile integrity test for 1,000mm dia bored cast in situ pile in accordance with IS:14893 and ASTM D5882, surface impact method or by suitable method as approved by Engineer-in-charge and providing interpretation report from cut off level to founding level as per detailed specifications and directions of Engineer-in-charge.	6.00	Nos.	4,000.00	Rupees Four Thousand Only	24,000.00	<i>Rupees Twenty Four Thousand Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
8	Providing and laying Reinforced cement concrete of M40 grade for various precast components such as precast beams, slab and other precast members using graded course & fine aggregates <u>excluding reinforcement work</u> but including cost of materials, labour, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures, shuttering, levelling, compacting, curing, installing all pipe support and mechanical/ electrical fittings, fixtures, steel work with necessary welding to reinforcement, anchoring into concrete, sleeves for fenders, pipes for electrical cables etc. complete and transporting the beams from casting yard to jetty and placing in position to lines and levels including necessary bedding in cement mortar 1:2 etc. complete, as per drawings, detailed specifications and directions of Engineer-in-Charge. (Fenders, mechanical equipment will be paid under separate items)	39.00	m3	25,330.00	Rupees Twenty Five Thousand Three Hundred Thirty Only	9,87,870.00	<i>Rupees Nine Lakh Eighty Seven Thousand Eight Hundred Seventy Only</i>
9	Providing and laying in-situ Reinforced cement concrete of M40 grade for various components such as Pile caps, Pile Muff, Beams, Slabs etc. using graded course & fine aggregates <u>excluding reinforcement work</u> but including cost of materials, labour, shuttering, levelling, compacting, curing, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures, providing necessary arrangements on slab and beam for fixing bollards, fenders, brackets, installing all pipe support and mechanical/ electrical fittings, fixtures, steel work with necessary welding to reinforcement, anchoring into concrete, pipes for electrical cables etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge. (Fenders, mechanical equipment will be paid under separate items)	36.00	m3	21,670.00	Rupees Twenty One Thousand Six Hundred Seventy Only	7,80,120.00	<i>Rupees Seven Lakh Eighty Thousand One Hundred Twenty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
10	Providing and laying in situ Reinforced cement concrete of M40 grade for Kerb, Handrails and Posts using graded course & fine aggregates, <u>excluding reinforcement work</u> but including shuttering, levelling, compacting, curing, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures etc. complete all as per drawings, detailed specifications and directions of Engineer-in-charge.	1.50	m3	21,970.00	Rupees Twenty One Thousand Nine Hundred Seventy Only	32,955.00	<i>Rupees Thirty Two Thousand Nine Hundred Fifty Five Only</i>
11	Providing and fixing reinforcement using TMT/CRS/ HYSD bars of Fe 550/Fe 500/Fe 415 grade for the RCC works under items 8 to 10 above, including conveying, straightening, cutting, bending, welding, lapping and tying in position, fabrication and fixing dowels, shear ties and placing with adequate lapping lengths etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	14.00	T	1,41,670.00	Rupees One Lakh Forty One Thousand Six Hundred Seventy Only	19,83,380.00	<i>Rupees Nineteen Lakh Eighty Three Thousand Three Hundred Eighty Only</i>
12	Providing and laying in situ reinforced cement concrete of M25 grade using graded course & fine aggregates, mixed with secondary reinforcement of “poly propylene fibre” make for wearing course of approximate average thickness of 75 mm over deck slab and finishing the surface with floor hardener of approved quality @ 5kg/m ² monolithically to the base concrete to provide highly abrasion resistant surface, including casting in panels, providing slopes on surfaces as specified, vibrating, tamping, curing etc. complete as per drawings, detailed specifications and directions of Engineer-in- Charge.	9.00	m3	18,670.00	Rupees Eighteen Thousand Six Hundred Seventy Only	1,68,030.00	<i>Rupees One Lakh Sixty Eight Thousand Thirty Only</i>
13	Providing and placing Class-II PVC pipe of 110mm outer Diameter in the RCC kerb for laying water supply and the electrical lines etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge	16.00	m	710.00	Rupees Seven Hundred Ten Only	11,360.00	<i>Rupees Eleven Thousand Three Hundred Sixty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
14	Providing and fixing in position to lines and levels 10 tonne capacity cast steel bollard, Single horn (Single lobe) type, as shown in the drawing including supplying and fixing in position with all fixtures such as Hot Dip galvanized M20 anchor bolts, nuts, grouting inside with cement concrete of M40 grade <u>excluding reinforcement</u> and including fixing the anchor bolts with template arrangements in the proper alignment as shown in the drawing, including painting the bollard and all steel works with two coats of anticorrosive epoxy paint over a coat of epoxy primer etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge.	2.00	Nos.	38,450.00	Rupees Thirty Eight Thousand Four Hundred Fifty Only	76,900.00	<i>Rupees Seventy Six Thousand Nine Hundred Only</i>
15	Providing and fixing in position arch-type rubber fenders 300 mm H and 1m long having energy absorption of 2.9 Ton-m per metre at max 50% deflection and max reaction force 30.1 T per metre including bolts, nuts and washers of stainless steel SS 316 grade, all fixtures, fixing rigidly in correct alignment and position on side of jetty, as per drawings, handling, transportation, materials, labour, staging, tools, equipment, plants, machineries etc. complete as per detailed specifications and directions of Engineer-in-charge.	3.00	Nos.	87,700.00	Rupees Eighty Seven Thousand Seven Hundred Only	2,63,100.00	<i>Rupees Two Lakh Sixty Three Thousand One Hundred Only</i>
16	Providing and fixing stainless steel (SS-316) mooring ring of outer dia. 200mm, using 25mm dia rod including welding with suitable electrodes, fixing the same to the stainless steel 400mm long eye hook cut out off 32mm dia bar fixed at the face of the jetty etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge.	4.00	Nos.	15,000.00	Rupees Fifteen Thousand Only	60,000.00	<i>Rupees Sixty Thousand Only</i>
17	Providing Interpenetrating Polymer Net work (IPN) anti corrosive polymer system (Cera Cote EP CR PE IP- Net) or its equivalent with two coats of epoxy phenolic ipnet coating of DFT 100 microns over one coat of epoxy phenolic ipnet primer coating of DFT 50 microns to entire external surface of super structure/sub structure of the jetty except top surface including cleaning the concrete surface with sand blasting or equivalent methods, cost of scaffolding, chipping removing dirt particles etc. complete as per detailed specifications and directions of Engineer-in-charge	252.00	m2	1,710.00	Rupees One Thousand Seven Hundred Ten Only	4,30,920.00	<i>Rupees Four Lakh Thirty Thousand Nine Hundred Twenty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
	Total for Part: A					2,04,33,402.00	<i>Rupees Two Crore Four Lakh Thirty Three Thousand Four Hundred Two Only</i>
B	Part:B - Providing and Driving Steel Sheet Piles for Reclamation						
18	Supply, driving and installation of steel sheet piles to line and level for retaining reclamation area as per drawings, and in accordance with specifications complete including cost of all materials, driving with vibro hammer, labour, equipments, material handling, transportation charges etc. complete as per the directions of Engineer-in-Charge	275.00	T	1,50,000.00	Rupees One Lakh Fifty Thousand Only	4,12,50,000.00	<i>Rupees Four Crore Twelve Lakh Fifty Thousand Only</i>
19	Painting the steel sheet piles up to bed level total dry film thickness (DFT) of 450 microns including primer coat, under coat and finishing coats including cleaning the sheet pile surface with sand blasting or equivalent methods, cost of scaffolding, chipping removing dirt particles etc. complete as per the detailed specifications and directions of Engineer-in-charge.	650.00	m2	750.00	Rupees Seven Hundred Fifty Only	4,87,500.00	<i>Rupees Four Lakh Eighty Seven Thousand Five Hundred Only</i>
20	Providing and laying in situ Reinforced cement concrete of M40 grade for Coping using graded course & fine aggregates, <u>excluding reinforcement work</u> but including shuttering, levelling, compacting, curing, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures etc. complete all as per drawings, detailed specifications and directions of Engineer-in-charge.	48.00	m3	21,670.00	Rupees Twenty One Thousand Six Hundred Seventy Only	10,40,160.00	<i>Rupees Ten Lakh Forty Thousand One Hundred Sixty Only</i>
21	Providing and laying in situ Reinforced cement concrete of M40 grade for Retaining wall, Kerb, Handrails and Posts using graded course & fine aggregates, <u>excluding reinforcement work</u> but including shuttering, levelling, compacting, curing, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures etc. complete all as per drawings, detailed specifications and directions of Engineer-in-charge.	14.00	m3	21,970.00	Rupees Twenty One Thousand Nine Hundred Seventy Only	3,07,580.00	<i>Rupees Three Lakh Seven Thousand Five Hundred Eighty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
22	Providing and fixing reinforcement using TMT/CRS/HYSD bars of Fe 550/Fe 500/Fe 415 grade for the RCC works under items 20 and 21 above, including conveying, straightening, cutting, bending, welding, lapping and tying in position, fabrication and fixing dowels, shear ties and placing with adequate lapping lengths etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	11.00	T	1,13,479.80	Rupees One Lakh Thirteen Thousand Four Hundred Seventy Nine and Eighty Paise Only	12,48,277.80	<i>Rupees Twelve Lakh Forty Eight Thousand Two Hundred Seventy Seven and Eighty Paise Only</i>
23	Providing Interpenetrating Polymer Net work (IPN) anti corrosive polymer system (Cera Cote EP CR PE IP- Net) or its equivalent with two coats of epoxy phenolic ipnet coating of DFT 100 microns over one coat of epoxy phenolic ipnet primer coating of DFT 50 microns to entire external surface of super structure/sub structure of the jetty except top surface including cleaning the concrete surface with sand blasting or equivalent methods, cost of scaffolding, chipping removing dirt particles etc. complete as per detailed specifications and directions of Engineer-in-charge	450.00	m2	1,710.00	Rupees One Thousand Seven Hundred Ten Only	7,69,500.00	<i>Rupees Seven Lakh Sixty Nine Thousand Five Hundred Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
	Total for Part: B					4,51,03,017.80	<i>Rupees Four Crore Fifty One Lakh Three Thousand Seventeen and Eighty Paise Only</i>
B	Part:C - Filling inside Reclamation area						
24	Excavation of earth/ clayey/ slushy materials up to a depth of (-)3m CD by mechanical means (Hydraulic excavator fixed on pontoon) / manual means over low lying areas/ backwater bed for reclamation with dredged sand and disposing the excavated materials at South End Reclamation area about 7km away from excavation area including levelling the disposed materials as per drawings, detailed specifications and directions of Engineer-in-charge.	3,000.00	m ³	514.30	<i>Rupees Three Hundred Fifty Two Only</i>	15,42,900.00	<i>Rupees Ninety Four Lakh Seventy Two Thousand Three Hundred Twenty Only</i>
25	Filling the reclamation area up to (-)3m CD with dredged material available at the western side of LNG terminal area at Puthuvypeen including loading, transporting from Puthuvypeen to the filling area, dumping, dozing, levelling and compacting with rolling the top surface with 8/10 tonne roller etc. complete as per drawings, detailed specifications and directions of the Engineer-in- Charge.	6,200.00	m ³	439.50	<i>Rupees Three Hundred Fifty Two Only</i>	27,24,900.00	<i>Rupees Ninety Four Lakh Seventy Two Thousand Three Hundred Twenty Only</i>
26	Filling with best quality laterite gravel brought from outside, to the required line and level including cost of all labour, material, loading, transporting, unloading, spreading, levelling, compacting with 8 to 10 tonne roller in layers etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge.	650.00	m ³	1,122.60	<i>Rupees One Thousand Only</i>	7,29,690.00	<i>Rupees Sixty Seven Lakh Thirty Thousand Only</i>
	Total for Part C					49,97,490.00	<i>Rupees One Crore Sixty Two Lakh Seventy Seven Thousand Three Hundred Twenty Only</i>
D	Part:D - Providing Road with GSB, WMM and Paver Blocks						
27	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared	3,000.00	m ²	8.70	<i>Rupees Eight and Seventy Paise Only</i>	26,100.00	<i>Rupees Twenty Six Thousand One Hundred Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
28	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	3,000.00	m ²	17.10	Rupees Seventeen and Ten Paise Only	51,300.00	Rupees Fifty One Thousand Three Hundred Only
29	Earth work in excavation in all kinds of soil by mechanical means (Hydraulic excavator)/ manual means over areas for laying road including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed as per drawings, detailed specifications and directions of Engineer-in-charge.	500.00	m ³	342.90	Rupees Three Hundred Forty Two and Ninety Paise Only	1,71,450.00	Rupees One Lakh Seventy One Thousand Four Hundred Fifty Only
30	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres	2,800.00	m ²	213.00	Rupees Two Hundred Thirteen Only	5,96,400.00	Rupees Five Lakh Ninety Six Thousand Four Hundred Only
31	Construction of granular sub-base (GSB) with material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25 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.	900.00	m ³	3,584.20	Rupees Three Thousand Five Hundred Eighty Four and Twenty Paise Only	32,25,780.00	Rupees Thirty Two Lakh Twenty Five Thousand Seven Hundred Eighty Only
32	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075mm) 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.	900.00	m ³	3,589.80	Rupees Three Thousand Five Hundred Eighty Nine and Eighty Paise Only	32,30,820.00	Rupees Thirty Two Lakh Thirty Thousand Eight Hundred Twenty Only

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
33	Providing and laying 100 mm thick High density cement concrete interlocking paver block of M-40 grade made by block making machine with strong vibratory compaction and of approved size and design/shape laid in required colour and pattern over and including 100mm thick compacted bed of 6mm metal, filling the joints with coarse sand etc. complete	3,000.00	m ²	1,211.10	Rupees One Thousand Two Hundred Eleven and Ten Paise Only	36,33,300.00	Rupees Thirty Six Lakh Thirty Three Thousand Three Hundred Only
34	Providing and fixing at or near ground level precast cement concrete 1:1½:3 (1 Cement: 1½ coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size) in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), including the cost of required centering, shuttering complete.	25.00	m ³	10,238.50	Rupees Ten Thousand Two Hundred Thirty Eight and Fifty Paise Only	2,55,962.50	Rupees Two Lakh Fifty Five Thousand Nine Hundred Sixty Two and Fifty Paise Only
Total for Part D						1,11,91,112.50	Rupees One Crore Eleven Lakh Ninety One Thousand One Hundred Twelve and Fifty Paise Only
E	Part:E -Dismantling the existing compound wall and relocating existing gates at Mattancherry Wharf						
35	Demolishing stone rubble masonry in cement mortar 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	123.00	m ³	2,384.20	Rupees Two Thousand Three Hundred Eighty Four and Twenty Paise Only	2,93,256.60	Rupees Two Lakh Ninety Three Thousand Two Hundred Fifty Six and Sixty Paise Only
36	Dismantling steel gate manually/ by mechanical means in built up sections without dismembering for re erection and stacking within 50 metres lead and re-erection as per the direction of Engineer-in-charge.	1,500.00	kg	8.40	Rupees Eight and Forty Paise Only	12,600.00	Rupees Twelve Thousand Six Hundred Only
37	Dismantling steel guard angles from the top of compound wall including dismembering and stacking within 50 metres lead as per the direction of Engineer-in-charge. The dismantled steel materials will be the property of the Contractor and for which net payment shall be made to the Employer considering the scrap value of Rs.15/ kg for the steel materials.	1,000.00	Kg	1.00	Rupees One Only	1,000.00	Rupees One Thousand Only

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38	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead as per the direction of Engineer-in-charge. The dismantled steel materials will be the property of the Contractor and for which net payment shall be made to the Employer considering the scrap value of Rs.15/kg for the steel materials.	700.00	Kg	20.70	Rupees Twenty and Seventy Paise Only	14,490.00	Rupees Fourteen Thousand Four Hundred Ninety Only
39	Removing mortar from and cleaning stones and concrete articles in cement mortar (net quantity of stacks of cleaned materials will be measured)	123.00	m ³	673.80	Rupees Six Hundred Seventy Three and Eighty Paise Only	82,877.40	Rupees Eighty Two Thousand Eight Hundred Seventy Seven and Forty Paise Only
40	Earth work in excavation in all kinds of soil by mechanical means (Hydraulic excavator)/ manual means over areas including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed as per drawings, detailed specifications and directions of Engineer-in-charge.	27.00	m ³	342.90	Rupees Three Hundred Forty Two and Ninety Paise Only	9,258.30	Rupees Nine Thousand Two Hundred Fifty Eight and Thirty Paise Only
41	Providing and laying Plain cement concrete of 1:3:6 with 20 mm aggregates to line and level for bedding concrete, properly mixed and consolidated with and rammers, including side shuttering, spreading, compacting, bailing out water, if required, cost and conveyance of all materials, labour, etc. complete as per drawing, detailed specifications and direction of the Engineer-in-charge.	4.00	m ³	8,521.80	Rupees Eight Thousand Five Hundred Twenty One and Eighty Paise Only	34,087.20	Rupees Thirty Four Thousand Eighty Seven and Twenty Paise Only
42	Providing and laying reinforced cement concrete of M25 grade (1:1.5:3) for columns foundation to line and level, excluding reinforcement work and including cost of all materials, labours, centering, shuttering, admixtures, vibrating, curing etc. complete as per drawings, detailed specification, and direction of Engineer-in-Charge.	12.00	m ³	10,501.00	Rupees Ten Thousand Five Hundred One Only	1,26,012.00	Rupees One Lakh Twenty Six Thousand Twelve Only
43	Providing and laying reinforced cement concrete of M25 grade (1:1.5:3) for columns to line and level, excluding reinforcement work and including cost of all materials, labours, centering, shuttering, admixtures, vibrating, curing etc. complete as per drawings, detailed specification, and direction of Engineer-in-Charge.	7.00	m ³	10,619.00	Rupees Ten Thousand Six Hundred Nineteen Only	74,333.00	Rupees Seventy Four Thousand Three Hundred Thirty Three Only
44	Providing 12 mm thick plastering with cement mortar 1:3 (1cement : 3sand) on columns/ walls, trowelled hard including scaffolding, curing etc. complete as per drawings, detailed specifications and directions of the Engineer-in-Charge.	35.00	m ²	362.70	Rupees Three Hundred Sixty Two and Seventy Paise Only	12,694.50	Rupees Twelve Thousand Six Hundred Ninety Four and Fifty Paise Only

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45	Providing and fixing reinforcement using TMT/CRS/ HYSD bars of Fe 550/Fe 500/Fe 415 grade for the RCC works under items 42 and 43 above, including conveying, straightening, cutting, bending, welding, lapping and tying in position, fabrication and fixing dowels, shear ties and placing with adequate lapping lengths etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	4.50	T	1,13,479.80	<i>Rupees One Lakh Thirteen Thousand Four Hundred Seventy Nine and Eighty Paise Only</i>	5,10,659.10	<i>Rupees Five Lakh Ten Thousand Six Hundred Fifty Nine and Ten Paise Only</i>
46	Painting the plastered surface with Acrylic Smooth exterior paint of approved brand and shade (two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm) to give an even shade including cost of all materials, labour etc. all complete as per detailed specifications and directions of Engineer-in-Charge	35.00	m ²	223.80	<i>Rupees Two Hundred Twenty Three and Eighty Paise Only</i>	7,833.00	<i>Rupees Seven Thousand Eight Hundred Thirty Three Only</i>
47	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer (epoxy primer) using structural steel etc. as required for rectification to gates including cost of all materials, labour etc. complete as per drawings, detailed specifications and directions of the Engineer-in-Charge.	400.00	Kg	178.00	<i>Rupees One Hundred Seventy Eight Only</i>	71,200.00	<i>Rupees Seventy One Thousand Two Hundred Only</i>
48	Refixing of existing dismantled and repaired steel gate of size 7.25 x 2.7 m (approx.) with necessary fixtures including cost of all materials, labour etc. complete as per drawings, detailed specifications and directions of the Engineer-in-Charge.	1.00	No.	15,000.00	<i>Rupees Fifteen Thousand Only</i>	15,000.00	<i>Rupees Fifteen Thousand Only</i>
49	Refixing of existing dismantled and repaired steel gate of size 6 x 2.5 m (approx.) with necessary fixtures including cost of all materials, labour etc. complete as per drawings, detailed specifications and directions of the Engineer-in-Charge.	1.00	No.	10,000.00	<i>Rupees Ten Thousand Only</i>	10,000.00	<i>Rupees Ten Thousand Only</i>
50	Refixing of existing dismantled and repaired steel gate of size 1.20 x 2.4 m (pprox.) with necessary fixtures including cost of all materials, labour etc. complete as per drawings, detailed specifications and directions of the Engineer-in-Charge.	1.00	No.	5,000.00	<i>Rupees Five Thousand Only</i>	5,000.00	<i>Rupees Five Thousand Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
51	Painting the refixed steel gates with Epoxy paint (two or more coats) prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. as per drawings, detailed specifications and directions of the Engineer-in-Charge.	35.00	m ²	257.90	Rupees Two Hundred Fifty Seven and Ninety Paise Only	9,026.50	Rupees Nine Thousand Twenty Six and Fifty Paise Only
52	Transporting the dismantled unusable materials including loading, transporting, unloading and levelling at site to the parking area within a lead of 1 km as per detailed specifications and directions of the Engineer-in-Charge.	31.00	m ³	142.60	Rupees One Hundred Forty Two and Sixty Paise Only	4,420.60	Rupees Four Thousand Four Hundred Twenty and Sixty Paise Only
53	Levelling the dismantled materials at the parking area and compacting the area with rolling using 8-10t road roller as per detailed specifications and directions of the Engineer-in-Charge.	540.00	m ²	1.20	Rupees One and Twenty Paise Only	648.00	Rupees Six Hundred Forty Eight Only
	Total for Part E					12,94,396.20	Rupees Twelve Lakh Ninety Four Thousand Three Hundred Ninety Six and Twenty Paise Only
F	Part:F -Construction of new compound wall						
54	Earth work excavation in all kinds of soil by mechanical means (Hydraulic excavator)/ manual means over areas including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed as per drawings, detailed specifications and directions of Engineer-in-charge.	45.00	m ³	342.90	Rupees Three Hundred Forty Two and Ninety Paise Only	15,430.50	Rupees Fifteen Thousand Four Hundred Thirty and Fifty Paise Only
55	Providing and laying Plain cement concrete 1:2:4 with 20 mm aggregates below foundation to line and level, properly mixed and consolidated with and rammers, including side shuttering, spreading, compacting, bailing out water, if required, cost and conveyance of all materials, labour, etc. complete as per drawing, detailed specifications and direction of the Engineer-in-charge.	9.00	m ³	9,235.90	Rupees Nine Thousand Two Hundred Thirty Five and Ninety Paise Only	83,123.10	Rupees Eighty Three Thousand One Hundred Twenty Three and Ten Paise Only
56	Random Rubble Masonry in CM 1:6 (1 cement : 6 coarse sand) <u>with retrieved rubble</u> for foundation of compound wall. including racking out joints and grooving of joints, curing etc. complete as per detailed specifications and directions of Engineer- in- Charge.	27.00	m ³	5,515.40	Rupees Five Thousand Five Hundred Fifteen and Forty Paise Only	1,48,915.80	Rupees One Lakh Forty Eight Thousand Nine Hundred Fifteen and Eighty Paise Only

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
57	Random Rubble Masonry in CM 1:6 (1 cement : 6 coarse sand) <u>with retrieved rubble</u> for superstructure of compound wall. including racking out joints and grooving of joints, curing etc. complete as per detailed specifications and directions of Engineer- in- Charge.	40.00	m ³	7,420.10	<i>Rupees Seven Thousand Four Hundred Twenty and Ten Paise Only</i>	2,96,804.00	<i>Rupees Two Lakh Ninety Six Thousand Eight Hundred Four Only</i>
58	Providing Random Rubble Masonry (first sort) with hard stones in CM 1:6 (1 cement : 6 coarse sand) for superstructure of compound wall. including racking out joints and grooving of joints, curing etc. complete as per detailed specifications and directions of Engineer- in- Charge.	26.00	m ³	10,179.20	<i>Rupees Ten Thousand One Hundred Seventy Nine and Twenty Paise Only</i>	2,64,659.20	<i>Rupees Two Lakh Sixty Four Thousand Six Hundred Fifty Nine and Twenty Paise Only</i>
59	Extra for random rubble masonry with hard stone (first sort) for square or rectangular pillars of compound wall constructed as per item No.58 above as per detailed specifications and directions of Engineer- in- Charge.	13.00	m ³	990.10	<i>Rupees Nine Hundred Ninety and Ten Paise Only</i>	12,871.30	<i>Rupees Twelve Thousand Eight Hundred Seventy One and Thirty Paise Only</i>
60	Flush/ Ruled pointing the rubble masonry work with cement mortar 1:3 (1 cement : 3 fine sand) as per detailed specifications and directions of Engineer- in- Charge.	310.00	m ²	387.90	<i>Rupees Three Hundred Eighty Seven and Ninety Paise Only</i>	1,20,249.00	<i>Rupees One Lakh Twenty Thousand Two Hundred Forty Nine Only</i>
61	Providing and laying Plain cement concrete 1:2:4 (1 Cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size) on top of compound wall for coping including cost of all materials, labour, shuttering, compacting, curing and removal of shuttering etc. complete as per drawings, detailed specifications and directions of the Engineer-in-Charge	50.00	m ³	12,244.20	<i>Rupees Twelve Thousand Two Hundred Forty Four and Twenty Paise Only</i>	6,12,210.00	<i>Rupees Six Lakh Twelve Thousand Two Hundred Ten Only</i>
62	Fabricating and fixing MS angle Y-frame over compound wall using angle of size 50mmx 50mm x 6mm with cement concrete as per item 61 above to line and level, including spitting angles and bent at right angle in opposite direction for fixing barbed wire, cost of all materials, labour, applying one coat of epoxy primer of approved brand and manufacture, scaffolding etc. complete as per drawing, detailed specifications and directions of the Engineer-in-Charge.	500.00	Kg	125.60	<i>Rupees One Hundred Twenty Five and Sixty Paise Only</i>	62,800.00	<i>Rupees Sixty Two Thousand Eight Hundred Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
63	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. 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 (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	75.00	m	395.20	Rupees Three Hundred Ninety Five and Twenty Paise Only	29,640.00	Rupees Twenty Nine Thousand Six Hundred Forty Only
64	Finishing with Epoxy paint (two or more coats) to MS guard angles prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.	20.00	m ²	257.90	Rupees Two Hundred Fifty Seven and Ninety Paise Only	5,158.00	Rupees Five Thousand One Hundred Fifty Eight Only
Total for Part F						16,51,860.90	Rupees Sixteen Lakh Fifty One Thousand Eight Hundred Sixty and Ninety Paise Only
G	Part:G -Construction of Box culvert and drain						
65	Earth work in excavation in all kinds of soil by mechanical means (Hydraulic excavator)/ manual means over areas including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed as per drawings, detailed specifications and directions of Engineer-in-charge.	260.00	m ³	342.90	Rupees Three Hundred Forty Two and Ninety Paise Only	89,154.00	Rupees Eighty Nine Thousand One Hundred Fifty Four Only
66	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075mm) 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 hand roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	32.00	m ³	3,589.80	Rupees Three Thousand Five Hundred Eighty Nine and Eighty Paise Only	1,14,873.60	Rupees One Lakh Fourteen Thousand Eight Hundred Seventy Three and Sixty Paise Only

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
67	Providing and laying Plain cement concrete of 1:3:6 with 20 mm aggregates to line and level for bedding concrete, properly mixed and consolidated with and rammers, including side shuttering, spreading, compacting, bailing out water, if required, cost and conveyance of all materials, labour, etc. complete as per drawing, detailed specifications and direction of the Engineer-in-charge.	21.00	m ³	8,514.10	Rupees Eight Thousand Five Hundred Fourteen and Ten Paise Only	1,78,796.10	Rupees One Lakh Seventy Eight Thousand Seven Hundred Ninety Six and Ten Paise Only
68	Providing and laying reinforced cement concrete of M25 grade (1:1.5:3) for for bottom slab, side walls and top slab of box culvert to line and level, excluding reinforcement work and including cost of all materials, labours, centering, shuttering, admixtures, vibrating, curing etc. complete as per drawings, detailed specification, and direction of Engineer-in-Charge.	33.00	m ³	10,619.00	Rupees Ten Thousand Six Hundred Nineteen Only	3,50,427.00	Rupees Three Lakh Fifty Thousand Four Hundred Twenty Seven Only
69	Providing and fixing reinforcement using TMT/CRS/ HYSD bars of Fe 550/Fe 500/Fe 415 grade for the RCC works under item 68 above, including conveying, straightening, cutting, bending, welding, lapping and tying in position, fabrication and fixing dowels, shear ties and placing with adequate lapping lengths etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	15.00	T	1,13,479.80	Rupees One Lakh Thirteen Thousand Four Hundred Seventy Nine and Eighty Paise Only	17,02,197.00	Rupees Seventeen Lakh Two Thousand One Hundred Ninety Seven Only
Total for Part G						24,35,447.70	Rupees One Crore Sixty Two Lakh Seventy Seven Thousand Three Hundred Twenty Only
H	Part:H - Construction of a Mooring dolphin and repositioning the existing Bollard for mooring of vessels at South Coal Berth on a new Mooring Dolphin						
70	Fabricating and supplying Mild Steel (MS) Liners at a suitable fabrication yard for bored cast-in-situ piles of 1,000mm dia. piles in backwater to the required length (approx. length 20m) using 6mm thick plate, including cost of all materials, labour, cutting, rolling, welding etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	15.30	T	1,23,390.00	Rupees One Lakh Twenty Three Thousand Three Hundred Ninety Only	18,87,867.00	Rupees Eighteen Lakh Eighty Seven Thousand Eight Hundred Sixty Seven Only

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
71	Transporting the fabricated MS liners fabricated as per item No.70 above from the fabrication yard to pile location, handling, pitching and driving the MS liners to required level and verticality including setting piling rigs/ gantry in position, temporary works for driving piles etc. complete all as per drawings, detailed specifications and directions of Engineer-in-charge.	6.00	Nos.	31,740.00	Rupees Thirty One Thousand Seven Hundred Forty Only	1,90,440.00	<i>Rupees One Lakh Ninety Thousand Four Hundred Forty Only</i>
72	Marine boring through all types of soils, viz gravel, clay, stiff clay, cemented clay, sand, weathered soft rock, leanmix concrete and boulders / rubble layer etc. (except soft and hard rock) for 1,000mm dia. vertical piles upto (-) 60m depth including mobilisation/ demobilisation of all plants and equipments, retaining of sides with bentonite slurry or polymer solutions and cleaning the bore holes, cost of all materials, labour, plants, equipments etc., including disposing of bored muck at a suitable dumping area, taking SPT values at founding level etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge. (only length below existing bed level will be measured and paid for.)	216.00	m	20,130.00	Rupees Twenty Thousand One Hundred Thirty Only	43,48,080.00	<i>Rupees Forty Three Lakh Forty Eight Thousand Eighty Only</i>
73	Providing and laying Reinforced cement concrete of M40 grade in-situ by standard method of placing by tremie pipe inside the Pile bore including cost of all materials, labour, all sampling and testing/ recording, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures, etc. complete but <u>excluding reinforcement work</u> as per drawings, detailed specifications and directions of Engineer-in-charge. [Only concrete quantity between founding level and 90cm above specified Pile cut off level will be measured & paid for].	198.00	m3	15,000.00	Rupees Fifteen Thousand Only	29,70,000.00	<i>Rupees Twenty Nine Lakh Seventy Thousand Only</i>
74	Providing and placing in position reinforcement in cages inside the marine pile bore using TMT/CRS/ ordinary quality HYSD bars of Fe550/ Fe500 / Fe415 grade including cost of all materials, labour, transporting to site, cutting, bending, welding, lapping, tying, binding, fabricating into cages, installing in position, providing cover blocks, hire charges of all equipment, machinery etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge. (The reinforcement bars, authorised laps, lifting hooks, development lengths, dowels for superstructure etc. as per approved barbending schedule, will be measured & paid for)	32.00	T	1,40,000.00	Rupees One Lakh Forty Thousand Only	44,80,000.00	<i>Rupees Forty Four Lakh Eighty Thousand Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
75	Chipping the concrete from the top of marine piles of 1,000mm dia. upto cutoff level, exposing the reinforcement, dressing pile head and disposing off the dismantled materials at suitable locations as per the directions of the Engineer-in-charge and levelling including hire charges of all equipment, machinery, labour, consumables etc. complete.	5.00	m3	9,740.00	Rupees Nine Thousand Seven Hundred Forty Only	48,700.00	<i>Rupees Forty Eight Thousand Seven Hundred Only</i>
76	Mobilizing, arranging and carryingout low strain pile integrity test for 1,000mm dia bored cast in situ pile in accordance with IS:14893 and ASTM D5882, surface impact method or by suitable method as approved by Engineer-in-charge and providing interpretation report from cut off level to founding level as per detailed specifications and directions of Engineer-in-charge.	6.00	Nos.	4,000.00	Rupees Four Thousand Only	24,000.00	<i>Rupees Twenty Four Thousand Only</i>
77	Providing and laying in-situ Reinforced cement concrete of M40 grade for various components such as Beams / Slabs etc. using graded course & fine aggregates <u>excluding reinforcement work</u> but including cost of materials, labour, shuttering, levelling, compacting, curing, mixing with Bipolar concrete penetrating corrosion inhibiting admixtures, providing necessary arrangements on slab and beam for fixing bollards, fenders, brackets, installing all pipe support and mechanical/ electrical fittings, fixtures, steel work with necessary welding to reinforcement, anchoring into concrete, pipes for electrical cables etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge. (Fenders, mechanical equipment will be paid under separate items)	62.00	m3	21,670.00	Rupees Twenty One Thousand Six Hundred Seventy Only	13,43,540.00	<i>Rupees Thirteen Lakh Forty Three Thousand Five Hundred Forty Only</i>
78	Providing and fixing reinforcement using TMT/CRS/HYSD bars of Fe 550/Fe 500/Fe 415 grade for the RCC works under item 77 above, including conveying, straightening, cutting, bending, welding, lapping and tying in position, fabrication and fixing dowels, shear ties and placing with adequate lapping lengths etc. complete as per drawings, detailed specifications and directions of the Engineer-in-charge.	10.00	T	1,41,670.00	Rupees One Lakh Forty One Thousand Six Hundred Seventy Only	14,16,700.00	<i>Rupees Fourteen Lakh Sixteen Thousand Seven Hundred Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
79	Providing and fixing in position D-type rubber fenders 150mm H x 150mm D having energy absorption of 0.25 Ton-m per metre at max 52.5% deflection and max reaction force 9.6T per metre including bolts, nuts and washers of stainless steel SUS 316 grade, all fixtures, rigidly in correct alignment and position all as per drawings, handling, transportation, third party inspection, materials, labour, staging, tools, equipment, plants, machineries etc. complete as per detailed specifications and directions of Engineer-in-charge.	15.00	m	36,000.00	Rupees Thirty Six Thousand Only	5,40,000.00	<i>Rupees Five Lakh Forty Thousand Only</i>
80	Providing and fixing Stainless steel (SS 316 grade) ladder of 3.5m length with 80x15mm stringers, 25mm dia rode rugs at about 250mm c/c, L-brackets of size 200x150x100mm and 15mm tk. at about 750mm c/c on RCC brackets including fixing with M20 anchor bolts etc. complete all as per drawings, detailed specifications and directions of Engineer-in-charge.	1.00	Nos.	40,000.00	Rupees Forty Thousand Only	40,000.00	<i>Rupees Forty Thousand Only</i>
81	Retrieve the existing 70T cast steel bollard from the damaged Mooring Dolphin after dismantling the RCC slab of the existing Mooring Dolphin to the extent required for retrieving the bollard and fixing the bollard in position to lines and levels on the new Mooring Dolphin, as shown in the drawing including supplying and fixing in position with all new fixtures such as suitable Hot Dip galvanized anchor bolts, nuts, grouting inside with cement concrete of M40 grade <u>excluding reinforcement</u> and including fixing the anchor bolts with template arrangements in the proper alignment as shown in the drawing, painting the bollard and all steel works with two coats of anticorrosive epoxy paint over a coat of epoxy primer etc. complete as per drawings, detailed specifications and directions of Engineer-in-charge.	1.00	Nos.	50,000.00	Rupees Fifty Thousand Only	50,000.00	<i>Rupees Fifty Thousand Only</i>
82	Providing Interpenetrating Polymer Net work (IPN) anti corrosive polymer system (Cera Cote EP CR PE IP- Net) or its equivalent with two coats of epoxy phenolic ipnet coating of DFT 100 microns over one coat of epoxy phenolic ipnet primer coating of DFT 50 microns to entire external surface of super structure/sub structure of the jetty except top surface including cleaning the concrete surface with sand blasting or equivalent methods, cost of scaffolding, chipping removing dirt particles etc. complete as per detailed specifications and directions of Engineer-in-charge	100.00	m2	1,710.00	Rupees One Thousand Seven Hundred Ten Only	1,71,000.00	<i>Rupees One Lakh Seventy One Thousand Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
	Total for Part: H					1,75,10,327.00	<i>Rupees One Crore Seventy Five Lakh Ten Thousand Three Hundred Twenty Seven Only</i>
I	Part:I - Providing Electrical Facilities ar Ro-Ro- Jetty						
83	SITC of 16 MTR HIGH mast with LED fittings etc. including providing the foundation as per site conditions	1.00	No	5,84,830.00	Rupees Five Lakh Eighty Four Thousand Eight Hundred Thirty Only	5,84,830.00	<i>Rupees Five Lakh Eighty Four Thousand Eight Hundred Thirty Only</i>
84	Supply of Outdoor type 400 A MV panel having SS 316 enclosure with 400 A 3P MCCB, 50 KA with LSIG trip with spreader links as incomer with V/A meter and with outgoing MCCBs with all standard protections, Ammeters, rated CT's and provision for fixing energy meter at each cubicle, extended terminals for taking shore supply etc. as per the Technical specification.LT CT, 3Phase Smart energy meter etc. in cubicle	1.00	No	3,84,732.00	Rupees Three Lakh Eighty Four Thousand Seven Hundred Thirty Two Only	3,84,732.00	<i>Rupees Three Lakh Eighty Four Thousand Seven Hundred Thirty Two Only</i>
85	Erection and commissioning of out door SS 316 material body 400 A MV panel with MCCB , LT CT 3 , outgoing terminals for taking shore supply , 3 Phase Smart energy meter in cubicle etc	1.00	No	6,037.50	Rupees Six Thousand Thirty Seven and Fifty Paise Only	6,037.50	<i>Rupees Six Thousand Thirty Seven and Fifty Paise Only</i>
86	Supply of 9 metre high hot-dip galvanised octagonal pole with single arm bracket/ GI Channel as per requirements for fixing LED luminaries with base plate, foundation bolts, RYB connector of 32 amp, MCB, flexible 3 Core supply cables etc.	14.00	Nos	21,200.00	Rupees Twenty One Thousand Two Hundred Only	2,96,800.00	<i>Rupees Two Lakh Ninety Six Thousand Eight Hundred Only</i>
87	Supply of reputed make LED street light luminare of 90 W , Min 120 LUM/ watt, IP66, IK 08, Driver, heat sink ,SPD 10KV etc; including fixtures suitable for fixing the same etc. with min.5 years warranty	12.00	Nos	3,900.00	Rupees Three Thousand Nine Hundred Only	46,800.00	<i>Rupees Forty Six Thousand Eight Hundred Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
88	Supply of out door type 11KV, 4 Panel SF6 compact RMU, Extendable ,motorised , DA compatible with 4 no.LBS with live line indicators, duplex marine painting etc.	1.00	No	6,53,333.00	Rupees Six Lakh Fifty Three Thousand Three Hundred Thirty Three Only	6,53,333.00	<i>Rupees Six Lakh Fifty Three Thousand Three Hundred Thirty Three Only</i>
89	Erection & commissioning of out door type 4Panel SF6 compact , motorised RMU mentioned in item no.1 above including shifting and commisiointing of existing CMU near Q1 SS to the new shed.	1.00	No	20,750.00	Rupees Twenty Thousand Seven Hundred Fifty Only	20,750.00	<i>Rupees Twenty Thousand Seven Hundred Fifty Only</i>
90	Supply of materials and providing foundation, trench , MS cover , fencing, roofing etc. for 4 panel RMU, CMU, MV panel etc.	10.50	m2	12,500.00	Rupees Twelve Thousand Five Hundred Only	1,31,250.00	<i>Rupees One Lakh Thirty One Thousand Two Hundred Fifty Only</i>
91	SITC of Polycarbonate outdoor Lighting panel for street lights having two level Timer control , 40A MCB , Contactor, A/M switch, Smart energy meter etc. and accessories as required .	1.00	No.	32,500.00	Rupees Thirty Two Thousand Five Hundred Only	32,500.00	<i>Rupees Thirty Two Thousand Five Hundred Only</i>
92	Supply of all materials and Providing foundation, erection and commissioning of 9 metre high hot-dip galvanised octagonal poles for erecting street light luminare of 90 W with lamp, Driver, heat sink with etc; including fixtures suitable for fixing the same on the street light poles, including erection and commissioning the light poles .	14.00	Nos	6,806.00	Rupees Six Thousand Eight Hundred Six Only	95,284.00	<i>Rupees Ninety Five Thousand Two Hundred Eighty Four Only</i>
93	Supply of 150 mm dia. B class GI pipe	18.00	m	1,850.00	Rupees One Thousand Eight Hundred Fifty Only	33,300.00	<i>Rupees Thirty Three Thousand Three Hundred Only</i>
94	Supply of 11 KV (E) grade 3 x 300 sq. mm. XLPE (E) , FRLSH aluminium conductor cable	410.00	m	1,806.00	Rupees One Thousand Eight Hundred Six Only	7,40,460.00	<i>Rupees Seven Lakh Forty Thousand Four Hundred Sixty Only</i>
95	HT cable Laying through open trench						

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
	a) Excavation and Construction of open trench in hard surface/ tarred portion/loose soil/ Road side / Road edge with RCC slab protection cover including supply and providing loose earth and refilling after laying the cable and disposal of surplus excavated soil as directed including supply of RCC slab, loose earth etc.	185.00	m	530.00	Rupees Five Hundred Thirty Only	98,050.00	<i>Rupees Ninety Eight Thousand Fifty Only</i>
	b) Laying of cable through trenches, build in trench/duct /loop / cable tray /SS cable tie/clamping along fencing etc.	315.00	m	125.00	Rupees One Hundred Twenty Five Only	39,375.00	<i>Rupees Thirty Nine Thousand Three Hundred Seventy Five Only</i>
96	Laying of HT cable through HDPE/ GI pipe for road crossing/ along berth etc.						
	a) Excavation for cable trenches at hard surface/ tarred portion , depth upto 1 M including dressing of sides and getting out the excavated soil, refilling with sand or good soil after laying HDPE pipe, ramming, watering and disposal of surplus excavated soil.	36.00	m	280.00	Rupees Two Hundred Eighty Only	10,080.00	<i>Rupees Ten Thousand Eighty Only</i>
	b) Laying of HDPE /GI pipe and HT cable in ground	36.00	m	205.20	Rupees Two Hundred Five and Twenty Paise Only	7,387.20	<i>Rupees Seven Thousand Three Hundred Eighty Seven and Twenty Paise Only</i>
97	Supply of 110 mm dia. HDPE pipe with thickness not less than 5 mm.	485.00	m	365.00	Rupees Three Hundred Sixty Five Only	1,77,025.00	<i>Rupees One Lakh Seventy Seven Thousand Twenty Five Only</i>
98	Laying of of 110 mm dia. HDPE pipe along the tray /wall by clamping , ground etc. including AL strips etc.	485.00	m	165.80	Rupees One Hundred Sixty Five and Eighty Paise Only	80,413.00	<i>Rupees Eighty Thousand Four Hundred Thirteen Only</i>
99	Supply of 35cm width FRP Ladder type cable tray	260.00	m	1,100.00	Rupees One Thousand One Hundred Only	2,86,000.00	<i>Rupees Two Lakh Eighty Six Thousand Only</i>
100	Fabrication and supply of GI angles 30mmx 30mm x 3 mm for fixing the FRP cable tray along wall etc. for laying HT/LT cable	590.00	Kg	112.00	Rupees One Hundred Twelve Only	66,080.00	<i>Rupees Sixty Six Thousand Eighty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
101	Fixing of 30cm width FRP tray along the wall with GI angles anchor bolts etc. for laying HT/LT cable	260.00	m	115.00	Rupees One Hundred Fifteen Only	29,900.00	Rupees Twenty Nine Thousand Nine Hundred Only
102	Supply of 40 mm dia. HDPE pipe for laying street light cable through ground etc.	285.00	m	60.00	Rupees Sixty Only	17,100.00	Rupees Seventeen Thousand One Hundred Only
103	Laying of 40mm HDPE pipe through the ground for laying street light cables .	285.00	m	40.00	Rupees Forty Only	11,400.00	Rupees Eleven Thousand Four Hundred Only
104	Supply and providing of indoor type heat shrinkable end termination kit suitable for 11 KV, 3 x 300 Sq mm XLPE Aluminium cable.	6.00	Nos	6,787.30	Rupees Six Thousand Seven Hundred Eighty Seven and Thirty Paise Only	40,723.80	Rupees Forty Thousand Seven Hundred Twenty Three and Eighty Paise Only
105	Supply of LT AL UG armoured cables						
	a) 3.5 C x 300 Sq mm FRLS XLPE insulated , armoured Al UG cable.	425.00	m	1,490.00	Rupees One Thousand Four Hundred Ninety Only	6,33,250.00	Rupees Six Lakh Thirty Three Thousand Two Hundred Fifty Only
	b) Supply of 1.1 KV grade PVC insulated multi stranded copper UG armoured cable of size 4 C x 4 Sq mm multi strand for giving supply to street light.	300.00	m	168.00	Rupees One Hundred Sixty Eight Only	50,400.00	Rupees Fifty Thousand Four Hundred Only
106	Laying of 1.1KV LT grade XLPE Al cable.						
	a) 4C x 4 Sq mm PVC insulated copper cable for taking supply to street light poles etc.in the excavated trench , walls by clamping etc.	300.00	m	53.00	Rupees Fifty Three Only	15,900.00	Rupees Fifteen Thousand Nine Hundred Only
	b) 3.5 x 300/400 Sq mm HT/LT XLPE aluminium cable by clamping along the wall/tray and through trench/ under ground/trench/ HDPE pipe by clamping etc.	415.00	m	152.20	Rupees One Hundred Fifty Two and Twenty Paise Only	63,163.00	Rupees Sixty Three Thousand One Hundred Sixty Three Only
107	Supply and Providing of end termination materials such as single compression type brass gland and Al: Lugs for following size of 1.1 KV cables						

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
	a) 4C x 4 Sq mm cable	32.00	Nos	269.10	Rupees Two Hundred Sixty Nine and Ten Paise Only	8,611.20	<i>Rupees Eight Thousand Six Hundred Eleven and Twenty Paise Only</i>
	b) 3.5 x 300 Sq mm cable	4.00	Nos	1,272.00	Rupees One Thousand Two Hundred Seventy Two Only	5,088.00	<i>Rupees Five Thousand Eighty Eight Only</i>
108	Supply and fixing of RCC cable route marker of size 100cm x 30cm x 10cm in Cement concrete	4.00	Nos	720.30	Rupees Seven Hundred Twenty and Thirty Paise Only	2,881.20	<i>Rupees Two Thousand Eight Hundred Eighty One and Twenty Paise Only</i>
109	Supply and Providing of all materials for plate earthing using Cu plate 600 x 600 x 3 mm size as per IS 3043 of 1987	2.00	Nos	16,263.00	Rupees Sixteen Thousand Two Hundred Sixty Three Only	32,526.00	<i>Rupees Thirty Two Thousand Five Hundred Twenty Six Only</i>
110	Supply and providing of pipe earthing with all materials as per IS 3043 of 1987.	2.00	Nos	4,809.00	Rupees Four Thousand Eight Hundred Nine Only	9,618.00	<i>Rupees Nine Thousand Six Hundred Eighteen Only</i>
111	Supply and providing of 40 mm dia. GI pipe B class with 120cm length and providing earthing for light poles.	14.00	Nos	656.40	Rupees Six Hundred Fifty Six and Forty Paise Only	9,189.60	<i>Rupees Nine Thousand One Hundred Eighty Nine and Sixty Paise Only</i>
112	Supply of 10 SWG Copper wire for earthing DB's, poles etc.	60.00	m	60.00	Rupees Sixty Only	3,600.00	<i>Rupees Three Thousand Six Hundred Only</i>
113	Laying of 10 SWG Copper wire for earthing DB's, poles etc.	60.00	m	20.00	Rupees Twenty Only	1,200.00	<i>Rupees One Thousand Two Hundred Only</i>
114	Supply and Laying of 40mm x 5 mm GI flats for connecting the HT/LT equipments and the earth pit at depth of 45cm below ground.	65.00	m	284.00	Rupees Two Hundred Eighty Four Only	18,460.00	<i>Rupees Eighteen Thousand Four Hundred Sixty Only</i>

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
115	Supply of outdoor type IP 66, 200W LED flood light fittings with min. 140 lumens/w with three year warranty.	6.00	Nos	8,900.00	Rupees Eight Thousand Nine Hundred Only	53,400.00	Rupees Fifty Three Thousand Four Hundred Only
116	Erection and commissioning of 200W LED flood light fittings for fixing in suitable areas/light poles with GI angles /supports, clamps etc.	6.00	Nos	650.00	Rupees Six Hundred Fifty Only	3,900.00	Rupees Three Thousand Nine Hundred Only
117	Supply of all materials and providing wiring using 1.5 sq mm PVC insulated FRLHS Copper wire in conduit system of wiring, modular boxes, plates , modular switches/plug etc.						
	a) For wiring light / tube light /ceiling light upto and including ceiling rose etc.	5.00	Pts	1,150.00	Rupees One Thousand One Hundred Fifty Only	5,750.00	Rupees Five Thousand Seven Hundred Fifty Only
	b) Supply & Providing 6 A plug socket with switch complete	3.00	Nos	439.00	Rupees Four Hundred Thirty	1,317.00	Rupees One Thousand Three Hundred
118	Providing lights, fans etc, at in the renovated building for Ro- Ro facilities etc.	1.00	Set	5,250.00	Rupees Five Thousand Two Hundred Fifty Only	5,250.00	Rupees Five Thousand Two Hundred Fifty Only
119	Supply, Installation and commissioning of powder coated CRCA sheet steel double door 6 way Distribution Board , IK 08 with incomer 1 no. 32A 2P MCB , 2P RCCB , 2 nos SP 32/10A MCB and Neutral link with all accessories	2.00	Nos	3,350.00	Rupees Three Thousand Three Hundred Fifty Only	6,700.00	Rupees Six Thousand Seven Hundred Only
120	Resurfacing and concreting with supply of CC items for excavated portion of road surface etc.	2.00	m3	9,294.00	Rupees Nine Thousand Two Hundred Ninety Four Only	18,588.00	Rupees Eighteen Thousand Five Hundred Eighty Eight Only
121	Supply and fixing of safety equipments such as HT grade rubber mat 3mm (2 meter length), fire buckets, first aid chart, fire extinguishers 4.5kg, HT grade rubber ghouse, earthing rod etc as per IS.	1.00	Set	12,000.00	Rupees Twelve Thousand Only	12,000.00	Rupees Twelve Thousand Only
122	Providing CRCA powder coated front cover for RMU with suitable items as required to avoid dust entry.	1.00	No	4,500.00	Rupees Four Thousand Five Hundred Only	4,500.00	Rupees Four Thousand Five Hundred Only

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
123	Supply of Outdoor type cable Junction boxes (IP65) made of Polycarbonate material with metric knockouts for cable entry , cable glands (2nos.), 16 A RYBN connector , SP MCB , supports for taking street light connection	15.00	Nos	1,970.00	Rupees One Thousand Nine Hundred Seventy Only	29,550.00	<i>Rupees Twenty Nine Thousand Five Hundred Fifty Only</i>
124	Excavation for cable trenches at hard surface/ tarred portion , depth upto 40cm for laying street light cables through HDPE pipe , including dressing of sides and getting out the excavated soil, refilling with sand or good soil after laying HDPE pipe, ramming, watering and disposal of surplus excavated soil.	190.00	m	112.00	Rupees One Hundred Twelve Only	21,280.00	<i>Rupees Twenty One Thousand Two Hundred Eighty Only</i>
125	Fixing and commisioning of Polycarbonate jn box for taking supply to street lights mounted in at pole foundation with GI angle etc.	15.00	Nos	195.00	Rupees One Hundred Ninety Five Only	2,925.00	<i>Rupees Two Thousand Nine Hundred Twenty Five Only</i>
126	Preparation of drawings, SL diagrams, earthing layout, Name borad, markings etc and submitting the scheme to CEA for approval and arranging inspection	1.00	LS	12,000.00	Rupees Twelve Thousand Only	12,000.00	<i>Rupees Twelve Thousand Only</i>
	Total for Part: I					49,20,657.50	<i>Rupees Forty Nine Lakh Twenty Thousand Six Hundred Fifty Seven and Fifty Paise Only</i>
	TOTAL FOR PARTS : A + B + C + D + E +F+G+H+I					10,95,37,711.60	<i>Rupees Ten Crore Ninety Five Lakh Thirty Seven Thousand Seven Hundred Eleven and Sixty Paise Only</i>
	BIDDER'S QUOTING AREA						
Sl. No.	Description of Work	Departmental Estimated Cost (Rs)	Percentage Quoted		Above/Below	Bidders Quoted Amount (Rs.)	Bidders Quoted Amount (Rs.) in Words
			* In Figures	^In Words			

Sl. No.	Sub- heads and items of work	Approximate Quantity	Unit	Departmental Rate/ unit Price (Rs)	Departmental Rate in Words	Departmental Amount in Rs.	Departmental Amount in Words
1	Percentage quoted above/ below the departmental amount shown in the above schedule	10,95,37,711.60			NIL	10,95,37,711.60	<i>Rupees Ten Crore Ninety Five Lakh Thirty Seven Thousand Seven Hundred Eleven and Sixty Paise Only</i>
<p>* The tenderer shall required to quote either plus or minus sign (eg: +5 or -5) in figures only and maximum two decimal digits shall only be accepted. ^Contents in cells under column "In words" shall be entered by the bidder.</p>							
<p>"This is an Electronic Submission No Need of Signature"</p>							