

Bill of Quantity

Name of work:- Raising & Upgradation of Plots inside Cargo Jetty Area.

I No	Description of item	Quantity	Rate	Unit	Amount
1	Removal of Garbage/debries by mechanical means (Hydraulic excavator)/manual means over areas including getting out and disposal of stuff lead beyond 2.00 km upto 2.50Km outside cargo jetty area, as directed by Engineer-in-charge.	20315.85		m3	
2	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto lead of 2.50 km beyind 2.00 km and lift upto 1.5 m, as directed by Engineer-in-Charge:				
A	All kinds of soil / GSB filled / Ashphlated surface	6355.20		m3	
3	Construction of granular sub - base by providing, laying, spreading and compacting CLOSE/ COARSE GRADED MATERIAL mixing at O.M.C spreading in uniform layers with motor grader on prepared surface and compacting with roller of required type and capacity to achieve the desired density including all labour, material , machinery, lighting, guarding, barricading complete as directed.(Mix in place method)	14299.20		m3	
4	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 achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.	32687.70		m3	
5	Collection, spreading and Consolidation of sand by Power vibratory roller of required capacity in a layer of not more then 15 cm including cost of Excavation ,Royalty, loading, unloading and transportation at the site of work.	8248.00		m3	
6	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)	9306.30		m3	

7	"Providing and laying design mix cement concrete of M-40 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work in full depth with sturdy M.S. channel sections, curing, making provision for contraction/expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler, complete all as per direction of Engineer-in-charge including cost of spreading of Metallic Hardening compound @ 4 kg /m2. (brand Fosrock / Sika / BASF or equivalent as approved by Engineer-in-charge)	20620.00		m3	
8	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.	1263429.00		kg	
9	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	With rapid setting bitumen emulsion				
i	On bituminous surface @ 0.25kg/sqm	114255.00		m2	
A	With medium setting bitumen emulsion				
i	On W.B.M / W.M.M. @ 0.75 kg/sqm	31776.00		m2	
10	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 equiped 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 specifcations and directions of Engineer-in-Charge.				
A	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 drum Type Hot Mix Plant of 60-90 TPH capacity.	11001.00		MT	
11	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 equiped 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.				
a	40/50 mm compacted thickness with bitumen of grade PMB-40 @ 6.00 % (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	13459.00		MT	

12	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.	851.95		m2	
13	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains, including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
a)	All kinds of soil / GSB filled area / Asphalted Surface	9382.20		m3	
14	Demolishing below ground level upto one meter depth & disposal of un-serviceable materials within 100 meter lead.				
a	Un-reinforced cement concrete upto 15cm thickness.	1058.74		m3	
b	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.	2647.25		m3	
15	Supplying and filling in plinth with river sand under floors, including watering, ramming, consolidating and dressing complete.	1058.30		m3	
16	Providing and laying in position machine batched and machine mixed design mix M-30 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping / placing of concrete to site of laying including the cost of centering,shuttering, finishing but excluding the cost of reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.				
A	All works upto plinth level for				
(i)	Raft	1973.13		m3	
(ii)	Wall	2666.08		m3	
(iii)	Slab	112.20		m3	
17	Plastering with cement mortar 1 : 4 including racking out joints, scrubbing & cleaning, finishing smooth curing including racking out joints etc. complete for interior plastering upto floor two level.				
a	12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand)	22470.50		m2	
18	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
a	Water thinnable cement primer	10103.10		m2	
19	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :				
a	Two or more coats on new work	10103.10		m2	

20	Providing and fixing signs board with a corrosion resistance 2mm thick aluminium alloy sheet with high intensity peismatic (HIP) grade retro reflectivesheet, including fixing on structure as directed including lettering overhead sign etc complete all laboursand materials as directed by engineer-in-charge (excluding cost of frame work).	20.16	m ²	
21	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a epoxy based priming coat of approved steel primer all complete.	1209.60	kg	
22	Finishing with Epoxy paint (two coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.	60.48	m ²	
23	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture	60.48	m ²	
24	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	2493.00	m ³	
a	Extra rate for conveying the excavated stuff by motor - truck Lead upto 2.00 BEYOND 1.50 KM	7480.00	m ³	
25	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.			
a	40 mm thick with 20 mm nominal size stone aggregate	4248.00	m ²	
		Total Rs.		
	Contractor	EXECUTIVE ENGINEER (HARBOUR)		
		DEENDAYAL PORT AUTHORITY		