

BILL OF QUANTITY

Name of work:- Providing Road network and SWD to newly added custom bonded area (25 Ha area)

I No	Description of item	QTY.	Rate	Unit	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), 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 / filled material	5246.00		m3	One cubic metre
2	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	1267.00		m3	One cubic metre
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)	1543.00		m3	One cubic metre
4	Providing and laying in position machine batched and machine mixed design mix M-30 grade cement concrete for 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	336.00		m3	One cubic metre
5	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	1104.00		m3	One cubic metre

I No	Description of item	QTY.	Rate	Unit	Amount
6	Providing, laying and fixing in position upto 1 km lead design mix reinforced cement controlled concrete for RCC Precast slab / RCC Precast curbing of design mix M-30 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including placing of concrete to site of laying including the cost of centering,shuttering, finishing , 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. (Rate is exclusive of cost of reinforcement)	1011.00		m3 One cubic metre	
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.	198391.00		kg One Kilogramme	
8	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.	1312.00		m3 One cubic metre	
A	Extra rate for conveying the excavated stuff by motor - truck				
	a) Lead upto 2.00 BEYOND 1.50 KM	3934.00		m3 One cubic metre	
9	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	20 mm cement plaster of mix :				
(i)	1:4 (1 cement: 4 fine sand)	4960.00		M2 One square metre	
10	Providing and laying 60mm thick facioy made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 80mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	2322.00		m2 One square metre	
11	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :	893.00		m3 One cubic metre	

I No	Description of item	QTY.	Rate	Unit	Amount
12	Providing and laying design mix cement concrete of M-30 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, providing dowel bars with sleeve/ tie bars wherever required, 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 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 and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately).	3000.00		m3 One cubic metre	
13	Providing and laying in position bitumen hot sealing compound for expansion joints etc.	5258.00		Rmt One running metre	
14	Removing existing 60 mm thick factory made cement concrete interlocking block from its position carefully to, stacking the same in nearby area and refixing the same at raised level as directed by Engineer in charge.	2310.00		1m2 One square metre	
15	Removing existing Reinforced cement concrete precast member 0.20m/0.30m wide at top, 0.35m/0.45m wide at bottom and 0.75m/1.00 mtr height block from its position carefully, stacking the same in nearby area and refixing the same at raised level as directed by Engineer in charge.	1540.00		Rmt One running metre	
16	Supplying and fixing Bi-Axial Geogrid (100 KN/m X 100KN/m) over a sand layer complete all labour and material as directed by Engineer-in-charge..	45500.00		1m2 One square metre	
17	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)	7700.00		M3 One cubic metre	
18	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	10200.00		M3 One cubic metre	

I No	Description of item	QTY.	Rate	Unit	Amount
19	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 medium setting bitumen emulsion				
i	On W.B.M / W.M.M. @ 0.75 kg/sqm	40800.00		m2	One square metre
20	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.				
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 Batch Type Hot Mix Plant of 100-120 TPH capacity.	13502.00		MT	One Metric tonne
21	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.				
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.	9188.00		M T	One metric tonne

TOTAL RS.

Contractor

Executive Engineer (Harbur)
Deendayal Port Authority