SCHEDULE B

Name of work : Development of Container Terminal at Tuna-Tekra "Common Road connectivity from Take of point upto back up area"., Stage-I

TI NO	Description Of Item	Qty	Rate		Unit		Amount
			In Fig	In Words	In Fig	In Words	
1	Providing & Laying of Quarry rocks weight from 10 to 200 kgs to be laid in the different layers of core portion of the break water, including the cost of execution, royalty, loading, unloading, trasportation and construction confirming to the lines, grades, side slopes and levels as indicated in the drwaing, specification are as directed by Engineer in charge	178077.00			MT		
2	Providing & Laying of Quarry rocks weights up to 10 kgs in filler layer to be laid over the core portion of the break water & side slopes, including the cost of execution, royalty, loading, unloading, trasportation and construction confirming to the lines, grades, side slopes and levels as indicated in the drwaing, specification are as directed by Engineer in charge	46735.00			MT		
3	Providing & Laying of Secondary and Primary Rubbie Armour layer of black trap variety / equivalent of weight ranging from 300 kgs to 1500 kgs to be laid in different layers over the sea-side slope of the break water core portion and also in the toe berm, including the cost of execution, royalty, loading, unloading, trasportation and construction confirming to the lines, grades, side slopes and levels as indicated in the drwaing, specification are as directed by Engineer in charge	133491.00			MT		
4	Providing embankment for road with quarry spall material including cost of excavation, royalty, loading, unloading, transportation and spreading in uniform layers of specified thickness with motor grader on prepared surface with wattering and compacting with vibratory power roller to achive the desired densitey, complete as per specifications and directions of Engineer -In-Charge.	225072.00			M3		

5	Providing soling for road with broken trap stone material maxmum size 230 mm and voids shall be filled with broken fragments, material including cost of excavation, royalty, loading, unloading, transportation and spreading in uniform layers of specified thickness with motor grader/loader on prepared surface with wattering and compacting with vibratory power roller , complete as per specifications and directions of Engineer -In-Charge.	**11340.00**			**M3**		
6	supplying and fixing Bi-Axial Geogrid (100 KN/m) over a sand layer complete all labour and material as directed by Engineer- in- charge.	**64000.00**			**M2**		
7	Providing & laying of sand on top of Bi-Axial Geogrid mat / soling for filling of surface voids, including wattering, ramming, consolidating and dressing completed.	**16580.00**			**M3**		
8	Construction of granular sub-base by providing close graded Material conforming to specifications mentioned in tender, carriage of material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface with wattering and compacting with vibratory power roller to achieve the desired density,including cost of royalty complete as per specifications and directions of Engineer-in-Charge With material conforming to Grade-I (size range 75 mm to 0.075 mm)	**16800.00**			**M3**		

9	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,spreading in uniform layers of specified thickness with motor grader on 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.	**8400.00**			**M3**		
10	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributer including preparing the surface & cleaning with mechanical broom With medium setting bitumen emulsion On W.B.M / W.M.M. @ 0.4kg/sqm	**28000.00**			**M2**		
11	Providing and laying semi- dense 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	25 mm 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.	**28000.00**			**M2**		
12	Rough stone pitching 22.5 cm thick laid in courses and required with hard stone having no side less than15 cm , with minimum depth of 20 cm set in Cement mortar 1:6 including preparing the bedding surface ect. All complete.	**30186.00**			**M2**		

13	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means over areas (exceeding 30 cm in depth, 1.50 m in width as well as 10 sqm on plan), including getting out and disposal of excavated earth lead upto 50 m and lift upto 4.50 m as directed by Engineer-in-charge.	**1808.00**			**M3**		
14	Disposal of Exavated earth material up to 1 km leads & lift including loading, unloading & stacking.	**1808.00**			**M3**		
15	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete	**143.00**			**M3**		
16	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	**143.00**			**M3**		
17	Centering and shuttering including strutting, propping etc. and removal of form for all heights :						
a	Foundations, footings, bases of columns, etc. for mass concrete	**120.00**			**M2**		
b	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	**2023.00**			**M2**		
c	Suspended floors, roofs, landings, balconies and access platform	**472.00**			**M2**		
18	Providing and laying in position machine batched and machine mixed design mix M- 35 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering,shuttering, finishing and 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.	**658.00**			**M3**		

19	including straightening, cutting,bending, placing in position and binding all complete upto plinth level. Thermo- Mechanically treated bars of grade Fe 500D or more	**118440.00**			**K G**		
20	12MM Cement plaster of mix 1:4 (1Cement:4 finesand)	**1337.00**			**M2**		
21	Providing and fixing precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) guard stone as per standard design, including finishing smooth in 1:3 cement mortar (1 cement : 3 fine sand) but excluding the cost of earth work, concrete in foundation and lettering etc. which shall be paid for separately.)	**80.00**			**Each**		
22	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 blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC ; 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size, steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours).Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc. complete as per drawing, specification						

	Cautionary /warning sign boards of equilateral triangular shape having each side of 900 mm with support length of 3650 mm	8.00			Each		
					Total		

CONTRACTOR

SUPERINTENDENT ENGINEER (C)
DEENDAYAL PORT AUTHORITY