

SCHEDULE-B

Name of the work :- Construction of electric substation near old unloader building to replace substation of 6th cargo berth & at plot B2 of 34 hectare area

Sr. No.	Description	Qty.	Rate		Unit	Amount
			In fig.	In words.		
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 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 1.5 m, as directed by Engineer-in-charge. All kinds of soil	915.90			M ³	
2	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials. All kinds of soil	264.00			M ³	
3	Dry Stone filling in foundation with Black trap stone Boulder including supply of Boulder and preparing surface complete including Royalty, loading, unloading and transportation at the site of work.	158.40			M ³	
4	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.	835.20			M ³	
5	Disposal of excavated stuff/demolished concrete etc. up to lead of 2.00 km by motor truck including loading, unloading and dressing at the disposal site as directed by engineer in charge.	344.70			M ³	
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)	137.90			M ³	
7	Providing and laying in position machine batched and machine mixed design mix M-25 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.“(Note :- Cement content considered in this item is @ 330 kg/cum.“Excess/ less cement used as per design mix is payable/recoverable separately). Providing M-30 grade concrete instead of M-25 All works upto plinth level				M ³	
a)	All works upto plinth level	295.38			M ³	
b)	All works above plinth level upto floor V level	127.70			M ³	

8	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	206.50			M ³	
9	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 : (A) Cement mortar 1:6 (1 cement : 6 coarse sand)	159.50			M ³	
10	Centering and shuttering including strutting, propping etc. and removal of form for all heights :					
(A)	Foundations, footings, bases of columns, etc. for mass concrete	160.00			M ²	
(B)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	491.80			M ²	
(C)	Columns, Pillars, Piers, Abutments, Posts and Struts	120.00			M ²	
(D)	Suspended floors, roofs, landings, balconies and access platform	252.70			M ²	
11	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.	76320.00			Kg.	
12	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : (A) Cement mortar 1:6 (1 cement : 6 coarse sand)	201.70			M ³	
13	12 mm cement plaster of mix : (A) 1:4 (1 cement: 4 fine sand)	1476.20			M ²	
14	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	630.60			M ²	
15	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	7990.10			Kg.	
16	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : (A) Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	361.20			M ²	
17	Finishing walls with Acrylic Smooth exterior paint of required shade : (A) New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	730.00			M ²	

18	Providing and fixing factory made door frame (single rebate) made out of single piece extruded solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 62 mm width & 32 mm thickness, frame will be mitred & Jointed with self driven self tapping screws of size 38 mm x 4 mm & PVC solvent cement, including fixing the frame to wall with suitable dia & length anchor fastener as per manufacturer's specification and direction of Engineer-in-charge.	107.20			M	
19	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles & rails shall be of size 75 mm x 30 mm having wall thickness 5 mm. The styles, top & bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1 mm, painted with primer, all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5 mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement & self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm & 15 mm integrally extruded in the middle of the lock rail & fixed with styles with the help of PVC solvent cement & self driven self tapping screws of size 100 mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-charge. Non decorative finish	8.00			M ²	
20	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications : (A) Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.75 ltr/10 sqm of approved brand and manufacture	9.60			M ²	
21	Applying priming coat: (A) With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood).	9.60			M ²	
22	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete (A) 200x10 mm	4.00			Each	
23	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : (A) 100 mm	8.00			Each	

24	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete : (A) 300x16 mm	8.00			Each	
25	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : (A) Powder coated aluminium (minimum thickness of powder coating 50 micron)	197.40			Kg.	
26	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): (A) With float glass panes of 5.50 mm thickness.	24.60			M ²	
27	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. (A) 80x0.90 mm M.S. laths with 0.90 mm thick top cover	90.00			M ²	
28	Extra for providing mechanical device chain and crank operation for operating rolling shutters. (A) Exceeding 16.80 sqm in area	90.00			M ²	
29	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. (A) 150 mm nominal inner dia Pipes	20.00			Mtr.	

30	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) (A) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	160.00			Kg.	
31	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): (A) With float glass panes of 5.50 mm thickness	25.00			M ²	
32	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	840.00			Kg.	
33	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : (A) New work (two or more coats) over and including water thinnable priming coat with cement primer.	1057.60			M ²	
34	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : (A) Two or more coats on new work	37.00			M ²	
35	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: (A) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. (B) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. (C) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around.	426.30			M ²	

36	<p>Providing and laying factory made chamfered edge Cement Concrete paver blocks In foot path, park & lawns driveway or light & traffic parking etc. of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand, all complete as per manufacturer's specifications & direction of Engineer-in-Charge.</p> <p>(A) 60mm thick Cement concrete paver block of M- 35 grade with approved colour, design & pattern.</p> <p>Basic Rates of Coloured inter locking C.C. paver Block (60mm thick, M-35) : Rs. 450.00/m2</p>	413.00			M ²	
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CONTRACTOR

Deendayal Port Authority