

**ESTIMATE**

**NAME OF WORK : Development of PreCast Multilevel Parking at ISBT Jabalpur.**

S.No.	Item No.	DESCRIPTION	Qty	Unit	Rate	Amount
1	2.28	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
	2.28.1	All kinds of soil	2941.00	100 Sqm	663.00	19,498.83
2	2.7	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 disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed.				
	2.7.1	Ordinary rock	1891.84	Cum	196.00	3,70,800.64
3	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				-
	4.1.3	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	385.04	Cum	4,094.00	15,76,353.76
4	5.2	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				-
	5.20.6	Thermo-Mechanically Treated bars	71290.62	Kg	60.00	42,77,437.20
5	5.20.7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				-
	5.22A.6	Thermo-Mechanically Treated bars	208497.76	Kg	60.60	1,26,34,964.26
6	20.1	Centering and shuttering including strutting, propping etc. and removal of form for :				-
	20.1.1	Foundations, footings, bases of columns, etc. for mass concrete	1228.50	Sqm	138.00	1,69,533.00
	20.1.2	Walls (any thickness) including attached pilasters buttresses, plinth beams and string courses etc.up to plinth level.	136.32	Sqm	216.00	29,445.12
	20.1.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	2252.00	Sqm	203.00	4,57,156.00
	20.1.6	Columns, Pillars, Piers, Abutments, Posts and Struts	1868.69	Sqm	282.00	5,26,970.58
7	5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).				-
	20.1.22	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	970.85	Sqm	302.00	2,93,196.70

8	5.31	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).				-
	5.33.1	All works upto plinth level	605.38	Cum	5,245.00	31,75,218.10
	5.33.2	All works above plinth level upto floor V level	1006.64	Cum	7,014.55	70,61,126.61
9	5.34	Extra for providing richer mixes at all floor levels.				-
		Note:- Excess/less cement over the specified cement content used is payable /recoverable separately.				-
	5.34.1	Providing M-30 grade concrete instead of M-25 grade BMC / RMC. (Note:- Cement content considered in M-30 is @ 340 kg/kg/cum)	1612.02	Cum	76.50	1,23,319.53
10	2.25	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.	1191.87	Cum	59.00	70,320.33
11	2.27.2	Supplying and filling in plinth with Jamuna sand under floors, including	1248.50	Cum	1,201.00	14,99,448.50
12	5.50	watering, ramming, consolidating and dressing complete.				-
		<b>Note: Excess/less cement over the specified cement content used as per design mix is payable/recoverable seperately)</b>				-
	5.50.1	Concrete Grade M-40 (Cement content 400kg)				-
	5.50.1.3	150 mm thick hollow core slab	608.40	metre	1,263.45	7,68,682.98
	5.50.1.5	250 mm thick hollow core slab	4162.00	metre	1,905.95	79,32,563.90
13	5.51	Fabrication & Manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs, columns etc, of various thickness, shape and size of different concrete grades manufactured in Controlled factory Environment with approved methodology including moulds (Pallet systems, Tilts form, table moulds, battery moulds, vertical moulds, beam moulds, columns moulds, staircase moulds, Facade moulds, etc.), mixing, transproting and placing of concrete, vibrating, curing, finishing, making necessary cutouts/holes of required sizes for services, yard handling & stacking all complete as per IS:11447:1985, as per approved shop drawings & design mix as per direction of Engineer-in-charge. (Cost of reinforcement. Mechanical, Electrical and Plumbing inserts will be paid seperately)				-
		<b>Note: Excess/less cement over the specified cement content used as per design mix is payable/recoverable seperately)</b>				-

	5.51.1	Concrete Grade M-35 (Cement content 370kg)	573.98	Cum	13,765.10	79,00,892.10
	5.51.2	Extra for usinh M-40 (Cement content 400kg) instead of M-35	573.98	Cum	228.30	1,31,039.63
14	5.52	Providing and laying in position Prestressing steel strands (low relaxation) on hollow core bed by using mechanical pulling arrangement like Rabbit/ Brd master including all accessories for Stressing & destressing operations as per approved make confirming to IS1343 & grade FY-1860 etc, complete as per drawings and direction of Engineer-in-charge.	20475.00	Kg	130.75	26,77,106.25
15	5.55	Providing & Applying weather proof sealant on outer joints of approved make confirming to IS & directed by Engineer-in-charge.				-
	5.55.1	Sealant 25mmX10mm at joints	912.00	metre	460.45	4,19,930.40
16	5.54	Erection & Installation of Precast/Prestressed Concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e. cranes, push-pull jacks & all another T & P for lifting Placing & Alignment of elements, within erection tolerance as per IS 15916 as per approved shop drawings and all complete as per the direction of Engineer-in-charge but excluding the cost of sim pads, non shrink grout and steel work i.e. hangers. All work up to fifth floor.				-
	5.54.1	Prestressed hollow core slab up to 200 mm thickness	608.40	Sqm	217.45	1,32,296.58
	5.54.2	Prestressed hollow core slab above 200 mm up to 400 mm thickness	4162.00	Sqm	367.15	15,28,078.30
	5.54.3	Solid concrete wall elements	573.98	Cum	2,642.60	15,16,799.55
17	5.57	Providing & Grouting of dowel tubes/ Shear keys / Joints of precast members with M-60 grade cementitious grout (Non Shrink) of approved make by suitable means (Free flowing /pump), curing etc. Complete as per directions of Engineers-in-charge. (The payment shall be made on the basis of actual weight of approved grout injected.)				-
	5.57.1	Stirrer mixed cementitious grout (non shrink) of approved make in dowel tubes / Shear keys / Joints of precast members.	5159.00	Kg	65.00	3,35,335.00
18	18.15	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	2465.00	Sqm	362.00	8,92,330.00

19	5.53	Transportaion of precast Elements by flat bed Trailor (Double/ Triple axle 40ft Length with proper accessories like a frame etc.) from factory, including the cost of loading, unloading & stacking at site with the help of required capacity cranes.				-
	5.53.1	Lead with in 15 km	3655.26	MT	389.85	14,25,003.11
	5.53.2	Add/deduct over item 5.53.1 for every additional lead of 5km (For 135 Km)	3655.26	MT	1,971.00	72,04,517.46
20	10.16	Steel work in built up tubular ( round, square or rectangular hollow tubes etc.) trusses/frame work etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				-
	10.16.1	Hot finished welded type tubes	147765.00	KG	83.00	1,22,64,495.00
21	12.5	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm + 0.05 %, total coated thickness with zinc coating 120 gsm as per IS: 277 in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	2490.00	sqm	578.00	14,39,220.00
22	12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm + 0.05 % total coated thickness, Zinc coating 120gsm as per IS: 277 in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :				-
	12.51.1	Ridges plain (500 - 600mm).	250.00	Mtr	558.00	1,39,500.00
23		Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 sand) :				-
	11.26	25 mm thick.	24.00	sqm	819.00	19,656.00
24	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				-
	12.41.2	110 mm diameter	320.00	Mtr	240.00	76,800.00
25	24.1	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design :				-
	24.10.1	With common burnt clay F.P.S. (modular) bricks of class designation 7.5	10.00	Each	3,248.00	32,480.00

26	1.6	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.				-
	1.7.7	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	1500.00	Mtr	253.00	3,79,500.00
27	19	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				-
	19.6.4	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	200.00	Mtr	530.00	1,06,000.00
28	1.42	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 Nos. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	150.00	No.		-
29	25.9	Providing and fixing following capacity TP&N disconnecter fuse switch unit inside the existing panel board with ISI marked HRC fuses including drilling holes in cubicle panel, making connections, etc. as required.				-
	29.9.1	32 A, TP&N	3.00	Each	1,672.00	5,016.00
30	5 27.5.1 27.5.1	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				-
	2.10.1	Single pole	36.00	each	205.00	7,380.00
31	27.7	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				-
	27.7.6	12 way, Double door	3.00	Each	1,478.00	4,434.00
32		4-6 PASSENGER Lift facility for G+2 Floors. Brands: Kone,Thyssen Krep,Otis,Schindler, Jhonson	1.00	Each		10,00,000.00
33		DG set of capacity - 45kVA Brands: Cummins, Tata, Mahindra, Kirloskar	1.00	Each		4,00,000.00
		<b>Sub Total</b>				<b>81023845.42</b>