Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech.
Sr. No.	Description	Unit	Labour	Composite	Specs.
6A	Providing and pre-stressing 1/2" (12.5 mm) dia. wire strand including cost of cable, Anchorage cone sets, corrugated steel sheath duct, PE grout vents, PE grout tube, PVC wraping tape, steel binding wire, cement grout and grout additive as per specifications including all arrangements, supply of recorded data in triplicate as per direction of the Engineer in charge	Ton	7,397.30 7,516.05	#REF! #REF!	6.2.1 6.2.2 6.5.2, 6.5, 6.5.10
6B	Launching and placing of Precast/ Pre-stressed Girder including all arrangements as per direction of the Engineer in charge	Tonne Ton	225.15 228.75	735.45 747.25	6.5.10
6-1	Supplying standard helical core for cable size 12/5mm of 12/7mm including cutting, wastage (closed helical length to be measured)	R.M. R.ft	49.53 15.10	492.46 150.10	6.5.4
6-2	Providing and fixing hydra rigid sheath including jointing sheath with threaded couplers and tapes				6.5.4
a)	Sheath size 32 mm internal dia and 37 mm external dia.	R.M. R.ft	45.50 13.85	457.16 139.35	
b)	Sheath size 42 mm internal dia and 48 mm external dia.	R.M. R.ft	46.98 14.30	470.50 143.40	
6-3	Providing and fixing self coupling welded steel sheath including threading, inserting cables in sheath, telescopic jointing, taping and binding				6.5.4
a)	Sheath size 32 mm internal dia and 37 mm external dia.	R.M. R.ft	28.50 8.70	291.27 88.80	
b)	Sheath size 42 mm internal dia and 48 mm external dia.	R.M. R.ft	24.96 7.60	254.85 77.70	
6-4	Providing and fixing anchorages to beam ends and top surface of beams (if no end block is used) on sets of one female and one male cone complete with inserts, holding device, lining on the face of female cone with gasket, interior with high tensile steel spiral and the male outer with corborandum ferrule connection etc.				6.2.2.(d)
a)	12/5 mm dia Anchorage	Set	1,143.75	4,314.50	
b)	12/7 mm dia Anchorage	Set	1,143.75	4,407.75	
c)	12/8 mm dia Anchorage	Set	1,143.75	4,407.75	
d)	Extra if RCC precast end block is used having 1:1:2 cement concrete including providing and fixing steel hooks, lifting and placing block in position, but excluding the cost of reinforcement.		1,946.90 55.15	15,599.08 441.75	
e)	Extra if Margalla crushed stone 3/4" (19 mm) is used in place of local crushed aggregate	Cu.m. Cu.ft	-	2,081.05 58.95	
6-5	Providing and fixing 40 mm internal dia steel pipe 10 S.W.G. at end of prestressing cable	R.M. R.ft	5.82 1.75	129.96 39.60	6.5.2 6.5.4

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech.
Sr. No.	Description	Unit	Labour	Composite	Specs.
6-6	Stressing freyssinet cables upto 12/7mm and of any length with stressing jacks to appropriate strength to beams as per specifications including all arrangements, supply of recorded data in triplicate and anchoring cables till release as per direction of the Engineer in charge		228.75	1,179.05	6.5.7
6-7 a)	Injecting cement mortar grout in prestressed cable of any dia and length under pressure  Cement mortar 1:1	R.M.	12.45	33.50	6.5.9
b)	Cement mortar 1 : 1.5	R.ft R.M. R.ft	3.80 12.45 3.80	10.20 60.30 18.40	
6-8	Cutting off and trimming ends of post-tensioned prestressed cables				
a)	12/5 mm dia cables	Cable end	308.80	352.70	
b)	12/7 mm dia Anchorage	Cable end	377.40	431.10	
6-9	Assembling, placing and attaching prestressing wires of sizes upto 8mm including looping and attaching at non jacking end including cost of binding wire/strands (length finally used to be measured)	1	5.70 1.75	8.00 2.45	6.5.5
6-10	Placing prefabricated cables carefully with sheath in the formwork to correct profile as per design and drawings including looping and attaching wires at non-jacking end (beam length to be measured)	1	31.45 9.60	34.60 10.55	6.5.4 6.5.5
6-11	Supplying high tensile steel wires upto 8mm size and strands for prestressed concrete as specified including cutting and wastage (untensioned length finally used in the prestressed member to be measured for the purpose of payment)	Ton	-	167,796.68 170,489.80	6.2.1
6-12	Providing and laying including fixing in position untensioned steel reinforcement as per design and drawings including straightening, removing rust, cutting, bending, binding, overlaps, wastage and the cost of cement concrete or M.S. chairs and the cost of binding wire				6.4
a)	M.S. bars	Tonne Ton	6,717.65 6,825.45	109,457.23 111,214.00	
b)	High tensile steel of specified grade.	Tonne Ton	6,717.65 6,825.45	151,541.67 153,973.90	
6-13	Supplying, fabricating and fixing formwork in prestressed concrete beams of all sections including removal of formwork	Sq.m. Sq.ft.	194.95 18.10	242.90 22.55	6.5.6
6-14	Supplying, fabricating and fixing formwork in the prestressed concrete slab of all sizes including removal of formwork	Sq.m. Sq.ft.	171.85 15.95	214.10 19.90	6.5.6
6-15	Providing and laying reinforced cement concrete using crushed aggregate 19mm and down gauge in the prestressed concrete work, compacting with vibrator and curing but excluding the cost of reinforcement and shuttering.				6.5.6
a)	1:1:2	Cu.m. Cu.ft	1,894.65 53.65	13,267.20 375.75	

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech.
J 110.	Labour			Composite	Specs.	
	b)	Extra if Margalla crushed stone is used in place of local crushed aggregate over item 6-15(a)	Cu.m. Cu.ft	-	2,081.05 58.95	
	c)	1:1.5:3	Cu.m. Cu.ft	1,894.65 53.65	11,286.25 319.65	
	d)	Extra if Margalla crushed stone is used in place of local crushed aggregate over item 6-15(c)	Cu.m. Cu.ft	-	2,270.25 64.30	
	e)	1:2:4	Cu.m. Cu.ft	1,894.65 53.65	10,132.75 286.95	
	f)	Extra if Margalla crushed stone is used in place of local crushed aggregate over item 6-15(e)	Cu.m. Cu.ft	-	2,270.25 64.30	
6-16	a)	Making good requisite anchorage recesses with cement concrete 1:1:2 using crushed aggregate of approved size including formwork and its removal and cutting		13.45	177.50	6.3 6.5.6
	b)	Extra if Margalla crushed stone is used in place of local crushed aggregate over item 6-16(a)	One job	-	21.14	
6-17		Stacking post tensioned precast beams and slabs upto lead of 500 ft (150 m) including loading and unloading				
	a)	Upto 50 ft. (15.25 m) length	Cu.m. Cu.ft	400.30 11.35	607.40 17.20	
	b)	Above 50 ft. (15.25 m) length	Cu.m. Cu.ft	507.05 14.35	716.30 20.30	
6-18		Hoisting post tensioned precast beams and slabs by mechanical means upto lift of 18 ft (5.5 m) above ground level and placing in position				6.5.10
	a)	Upto 50 ft. (15.25 m) length	Cu.m. Cu.ft	533.80 15.10	942.60 26.70	
	b)	Extra for every 12 ft. (3.75m) additional lift or part thereof on item 6-18(a) above	Cu.m. Cu.ft	213.50 6.05	286.70 8.10	
	c)	Above 50 ft. (15.25 m) length	Cu.m. Cu.ft	320.25 9.05	1,028.50 29.15	
	d)	Extra for every 12 ft. (3.75m) additional lift or part thereof on item 6-18(c) above	Cu.m. Cu.ft	533.80 15.10	1,091.10 30.90	
6-19		Stressing pretensioned wires sizes upto 7mm dia with stressing jacks to appropriate strength in the prestressed concrete work including providing end anchorage and its removal, supply of recorded data in triplicate, anchorage wires or strands till release.		114.40	673.60	6.5.7 6.5.8
6-20		Cutting off and trimming the ends of pretensioned wire size upto 8mm dia.	Wire	76.50	83.80	
6-21		Fabrication of high tensile steel prestressing cables for prestressed (post tensioned) concrete, including assembling by drawing the H.T. wire through metal spacer plate, inserting in helix core and taping or tying, sheathing in longitudinally welded metal corrugated sheath, positioning, anchorage with male and female set of anchorage cone, forming ducts for transverse cable, stressing cables with jack at both ends as per stressing schedule, maintaining stressing record and supply the same in the approved proforma to the Engineer-in-charge, making loop at blind end, including all materials required for it, grouting the cable ducts with cement, cutting projected ends and making good recesses etc. complete in all respects				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech.
			Labour	Composite	Specs.
a)	12/5 mm dia Anchorage	Set	1,143.75	4,314.50	
b)	12/7 mm dia Anchorage	Set	1,143.75	4,407.75	
c)	12/8 mm dia Anchorage	Set	1,143.75	4,407.75	
d)	Extra if RCC precast end block is used having 1:12 cement concrete including providing and fixing steel hooks, lifting and placing block in position, but excluding the cost of reinforcement.	Cu.m Cu.ft	1,946.90 55.15		