		Pipeline W	orks				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		IN INK	а	b	c1	c2	d
5.2	Handling, aligning and installing in true to line and level cast iron double flanged Sluice Valves (IS 14864) of the following diameters. This item includes transportation of valves and accessories from the storeyard to the project site, loading, unloading, hoisting, lowering, assembling and jointing including the cost of all jointing materials such as rubber gaskets, nuts, bolts, etc., and providing temporary supports, as per the specifications and drawings.						
(a)	80 mm dia (for Fire hydrant) PN1.0		25%	20%		40%	15%
(b)	100 mm dia PN1.0		25%	20%		40%	15%
(c)	150 mm dia PN1.0		25%	20%		40%	15%
(d)	200 mm dia PN1.0		25%	20%		40%	15%
, (e)	250 mm dia PN1.0		25%	20%		40%	15%
(f)	300 mm dia PN1.0		25%			40%	15%
(g)	80 mm dia (for Fire hydrant) PN1.6		25%			40%	15%
(h)	100 mm dia PN1.6		25%	20%		40%	15%
(i)	150 mm dia PN1.6		25%	20%		40%	15%
(j)	200 mm dia PN1.6		25%			40%	15%
(k)	250 mm dia PN1.6		25%			40%	15%
(l)	300 mm dia PN1.6		25%	20%		40%	15%
5.3	Providing and supplying of following diameters double flanged Butterfly valves PN 1.6 (manually operated) as per IS 13095 with all accessories, including approved anti-corrosive painting. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading, unloading, conveyance to storeyard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.						
(a)	400 mm dia		25%	3.75%	63.75%	0%	7.5%
(b)	500 mm dia		25%	3.75%	63.75%	0%	7.5%
(c)	600 mm dia		25%	3.75%	63.75%	0%	7.5%

		Pipeline W	orks				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			а	b	c1	c2	d
5.4	Handling, aligning, and fixing in true to line and level following diameters and rating double flanged Butterfly valves PN 1.6 (manually opereted as per IS 13095) including cost of required jointing material such as rubber packing, nuts bolts etc. The item includes transportation of valves and accessories from store yard to site, loading, unloading, hoisting, lowering, grinding wherever necessary, assembling and jointing, providing temporary supports etc., all complete with approved equipment, for valves of following diameters, for all lead and lift. The item shall be as per specification, drawing and as directed.						
(a)	400 mm diameter PN1.0		25%	20%		40%	15%
(b)	500 mm diameter PN1.0		25%	20%		40%	15%
(c)	400 mm diameter PN1.6		25%	20%		40%	15%
(d)	500 mm diameter PN1.6		25%	20%		40%	15%
5.5	Providing and supplying of following diameters of Double chamber Air valves with in built sluice valve PN 1.6 rating with flanged ends as per IS 14845, with all accessories required, including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to store yard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.						
(a)	80 mm dia		25%	3.75%	63.75%	0%	7.5%
(b)	100 mm dia		25%	3.75%	63.75%	0%	7.5%
(c)	150 mm dia		25%	3.75%	63.75%	0%	7.5%
	Handling, aligning, and installing in true to line and level following diameters Double chamber Air valves with in built sluice valve with all accessories and as per specifications and drawings. This item includes transportation of valves and accessories from the storeyard to the project site, loading, unloading, hoisting, assembling and jointing, including the cost of jointing materials such as rubber packing, nuts, bolts, etc., as per the specifications and drawings.						
(a)	80 mm diameter PN1.0		25%	20%		9 40%	15%

		Pipeline W	orks				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			а	b	c1	c2	d
(b)	100 mm diameter PN1.0		25%			40%	
(c)	150 mm diameter PN1.0		25%		L	40%	
(d)	80 mm diameter PN1.6		25%		<u> </u>	40%	
(e)	100 mm diameter PN1.6		25%			40%	
(f)	150 mm diameter PN1.6		25%	20%		40%	15%
	Providing and supplying of following diameters Pressure Reducing valve with double flanged ends and shall including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to storeyard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.		200	2.759/	62.75%	00/	7.50
	100mm dia		25%		L		
	150mm dia		25%				
	200mm dia		25%		L		
	250mm dia		25%	3.75%			
	300mm dia		25%	3.75%	63.75%	0%	7.5%
	Handling, aligning, and fixing in true to line and level following diameters <b>Pressure Reducing valve double flanged ends</b> . The item includes transportation of valves and accessories from store yard to site, loading, unloading, hoisting, lowering, grinding wherever necessary, assembling and jointing, including cost of jointing materials such as rubber packing, nuts bolts etc., providing temporary supports, all complete with approved equipment, for all leads and lifts. The item shall be as per specification, drawing and as directed.						
(a)	100mm dia PN1.0		25%	20%		40%	15%
(b)	150mm dia PN1.0		25%	20%		40%	15%
(c)	200mm dia PN1.0		25%	20%		40%	15%
(d)	250mm dia PN1.0		25%	20%		40%	15%
(e)	300mm dia PN1.0		25%	20%		40%	15%
(f)	400mm dia PN1.0		25%	20%		40%	15%
(g)	300mm dia PN1.6		25%	20%		40%	15%

		Pipeline W	orks	-			
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		111111	a	b	c1	c2	d
(h)	400mm dia PN1.6		25%	20%		40%	15%
5.10	Providing and supplying <b>Fire hydrants</b> of 80mm diameter as per IS 909, consisting single flanged outlet oblique type hydrant valve, and shall include cost of anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to site and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.  Handling, aligning, and fixing <b>Fire hydrants</b> true to line and level. The item includes transportation of valves and accessories from store yard to site, loading, unloading, hoisting, lowering, grinding wherever necessary, assembling and jointing with cost of jointing material such as rubber packing, nuts bolts, providing temporary supports etc., all complete with approved equipment, for all leads and lifts. The item shall be as per specification, drawing and as directed.		25%	3.75%	63.75%	0%	7.5%
(a)	80 mm dia PN1.0		25%	20%		40%	15%
(b)	80 mm dia PN1.6		25%	20%		40%	15%
	Subtotal						
6.0	VALVE CHAMBERS		<u> </u>		<u> </u>		
6.1	Construction of RCC and Brick masonry chambers for valves, hydrants, flow meters etc. including cost of PCC and RCC work, cost of supply and bending and binding of steel with required shuttering, cost of brick work with plaster from inside and outside, cost of precast slabs and supply and installation of SFRC frame and coves wherever required, including all the miscellaneous items of work, but excluding the supply and installation of pipes and specials, valves etc. The item shall be as per specification, drawing and as directed.						
(a)	Chamber for Sluice valve TYPE S1		25%	20%			15%
(b)	Chamber for Sluice valve TYPE S2		25%	20%			15%
(c)	Chamber for Wash out valve TYPEW1		25%	20%	20%	20%	15%

		Pipeline W					
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		III INK	a	b	c1	c2	d
	Chamber for Wash out valve TYPE W2		25%		20%		15%
` '	Chamber for <b>Butterfly valve</b> TYPE <b>B1</b>		25%				15%
. , ,	Chamber for <b>Butterfly valve</b> TYPE <b>B2</b>		25%	20%	20%	20%	15%
107	Chamber for Butterfly valve TYPE B3						
(h)	Chamber for Air valve TYPE A1		25%	20%	20%	20%	15%
(i)	Chamber for <b>Air valve</b> TYPE <b>A2</b>		25%	20%	20%	20%	15%
(j)	Chamber for Air valve TYPE A3		25%	20%	20%	20%	15%
(k)	Chamber for <b>Fire hydrant</b> TYPE <b>F1</b>		25%	20%	20%	20%	15%
(1)	Chamber for Pressure reducing valve/ Flowmeter TYPE P1		25%	20%	20%	20%	15%
(m)	Chamber for Pressure reducing valve/ Flowmeter TYPE P2		25%	20%	20%	20%	15%
(n)	Chamber for Pressure reducing valve/ Flowmeter TYPE P3		25%	20%	20%	20%	15%
(0)	Chamber for Pressure reducing valve and flow meter TYPE P4		25%	20%	20%	20%	15%
(p)	Chamber for Pressure reducing valve and flow meter TYPE P5	-	25%	20%	20%	20%	15%
(q)	Chamber for Pressure reducing valve and flow meter TYPE P6		25%	20%	20%	20%	15%
	Subtotal						
7.0	MISCELLENEOUS CIVIL WORK						
7.1	Plain Cement Concrete Work						
	Providing and placing plain cement concrete (PCC) of one of the following grades for thrust blocks, anchor blocks, floatation blocks, etc. with 20-40mm stone aggreate (crusher broken) including finishing the surface, shuttering and staging, curing etc. as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.						
(a)	Grade M15 concrete		25%	20%	0%	40%	15%
(b)	Grade M20 concrete		25%	20%	0%	40%	15%
7.2	Reinforced Cement Concrete Work  Providing and placing reinforced cement concrete (RCC) of one of the following grades with 10-20 mm stone aggregate (crusher broken) including shuttering and staging, curing etc. as per the specifications						
	and drawings and as directed by the Employer's Representative. This is Work not included in Item 6					Chief Evenerative	

		Pipeline W	orks				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		III INK	а	b	c1	c2	d
(a)	Grade M20 concrete		25%	20%	0%	40%	15%
(b)	Grade M25 concrete		25%	20%	0%	40%	15%
7.3	Concrete Reinforcement						
	Providing and fabricating steel reinforcement with Fe 415 grade steel for RCC work including straightening, cuting, bending, placing in position and tying (including cost of tie wire) ,taxes and duties, transportation etc. all complete, as per specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.		25%	20%	40%	0%	15%
7.4	Brick Masonry Work						
	Construction of Brick Masonry for sub/superstructure of 230/350 mm thick walls using cement mortar with a cement to sand ratio of 1:6. This item includes the cost of transportation of all materials, labor, scaffolding, curing etc. as per specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.		25%,	20%	0%	40%	15%
7.5	Plastering Work						
(a)	Providing and applying cement sand plaster 12 mm thick in a single coat using cement mortar with a cement to sand ratio of 1:4 without neeru finish to concrete or brick surfaces including scaffolding and curing as directed by the Employer's Representative. This is Work not included in Item 6.		25%	20%	0%	40%	15%
(b)	Providing and applying cement sand plaster 20 mm thick in a single coat using cement mortar with a cement to sand ratio of 1:4 without neeru finish to concrete or brick surfaces including scaffolding and curing as directed by the Employer's Representative. This is Work not included in Item 6.		25%	20%	0%	40%	15%
7.6	Providing and laying boulder soling with boulders 100-200mm size in foundation, packing with locally available mooram and sand, including watering, dressing and leveling, all complete as per drawing and specification and as directed.		25%	20%	0%	40%	15%

		Pipeline W					
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			a	b	c1	c2	d
7.7	Providing and laying 100 mm thick brick soling for foundations and under flooring with best quality jhama brick, sand packed and laid to level after preparing the subgrade including all labor and materials and dewatering if necessary, complete and as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.		25%	20%	0%	40%	15%
7.8	Structural Steel Work						
	Providing and fabricating structural steel work in rolled sections including joists, channels, angles, beams, etc. including cutting, fabricating, grinding, hoisting, erecting, fixing in position making bolted/welded connections, applying coatings etc., as per the specifications and drawings and as directed by the Employer's Representative.		25%	20%	40%	0%	15%
	Subtotal		1	:			
	Subtotal						
8.0	ROAD RESTORATION						
8.1	Reconstruction of Bituminous Asphalt Roads						
a)	Providing and laying of Granular sub base (GSB), as per specification drawing and as directed		25%	20%	0%	40%	15%
b)	Providing and laying of Prime coat, as per specification drawing and as directed		25%		0%	40%	15%
c)	Providing and laying of Wet mix macadam (WMM), as per specification drawing and as directed		25%			40%	15%
d)	Providing and laying of Dense graded bituminous macadam (DBM), as per specification drawing and as directed		25%	20%	0%	40%	15%
e)	Providing and laying of Semi dense bituminous concrete (SDBC), as per specification drawing and as directed		25%	20%	0%	40%	15%
f)	Providing and laying of Tack coat (TC), as per specification drawing and as directed	-	25%	20%	0%	40%	15%.
g)	Providing and laying of Bituminous macadam (BM), as per specification drawing and as directed		25%	20%	0%	40%	15%
h)	Providing and laying of Premix carpet (PC), as per specification drawing and as directed		25%	20%	0%	40%	15%

		Pipeline W	orks				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			a	b	c1	c2	d
8.2	Reconstruction of WBM Roads						
	Providing, laying spreading and compacting stone aggregates of specific sizes as per specification and drawing to water bound macadam including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of stone screenings & binding material, and completer as per specification drawing and as directed		25%	20%	0%	40%	15%
8.3	Reconstruction of Concrete Roads						
	Providing, placing and finishing Cement Concrete roads to match the existing roadway which was removed, if directed by the Employer's Representative. Grade M20 concrete shall be used and placed to the same depth as the existing roadway surface. A screeded finish shall be applied.		25%	20%	0%	40%	15%
8.4	Reconstruction of Brick Roads						
	Providing and laying of bricks on edge for road restoration on earth subgrade. The bricks shall be on edge, diagonally placed, and gap filled up with sand, all complete, as per specification and drawings.		25% <sub>.</sub>	20%	0%	40%	15%
	Subtotal						
	TOTAL						



		Pumping St	ation				
Item No.	Description		Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		in INR	а	b	c1	c2	d
1. CIV	VIL WORKS						
1.01	Site clearance by cleaning and grubbing Reservoir area including uprooting rank vegetation including grass, shrubs, bushes, removing temprory structure, removing all trees coming in the alignment with all contractor's machinery, labour, tools & plants, including obtaining permission from concerned departments with all lead and lift complete as directed by Engineer and as per standard specification in the entire proposed area.		25%	20%		40%	15%
1.02	Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material from the site and stacking and spreading as directed, including dewatering where necessary, preparing the bed for foundation etc. complete.						
a	Upto all lift		25%	20%		40%	15%
	Excavation for foundation / pipe trenches in soft rock or rippable rock at all levels and depth below ground including removing the excavated materials from the site and stacking and spreading as directed, including dewatering where necessary, preparing the bed for foundation etc. complete.						
a	Upto all lift		25%	20%		40%	15%
	Excavation for foundation / pipe trenches in hard rock or non rippable rock at all levels and depth below ground including removing the excavated materials from the site and stacking and spreading as directed including dewatering where necessary, preparing the bed for foundation etc. complete.						
a	Upto all lift		25%	20%		40%	15%
1.05	Providing and laying cement concrete (M-20) including curing, compaction etc. using hard broken stone aggregate 20 mm nominal size under the foundation and plinth, including cost of shuttering, complete. (For all Non structural Concrete)		25%	20%		40%	15%

GWSP/LCB/C#06

Chief Executive Officer
Guwahati Metropolitan Dev

	Pumping Station										
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)				
			a	b	c1	c2	d				
1.06	Providing and laying in position compacted gravel bedding All work up to plinth level for Reservoir and Service building as per drawing and specifications.		25%	20%		40%	15%				
1.07	Filling with excavated soil including watering, ramming, consolidating and dressing complete and disposal of surplus exeavated materials to a place identified by the Contractor and approved by the Engineer including loading, unloading, stacking etc complete as per drawing and specifications.		25%	20%		40%	15%				
1.08	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinformed cement concrete structural elements, including the cost of centering, Shuttering, including curing, compaction, finishing and making good the joints and admixtures in recommended proportions as per IS 9103. M 30grade reinformed cement concrete. (For all structural Concrete)										
i	Foundaton base slab, Sump Walls upto base slab of reservoir										
a	For Reservoir		125%	20%		40%	15%				
b	For Control Room		25%			40%	15%				
ii	In walls, columns, roof slab, beams, lintels, chhajjas, ventilators and stair etc.										
a	For Rescryoir		25%	20%		40%	15%				
b	For Control Room		25%	20%		40%	15%				
1.09	Providing and fixing in position steel bar reinforcement (Tor Steel Fe-415 Grade) of various diameters for RCC footings, foundations, slabs, beams, columns, Retaining wall, newels, chajjas, lintels, copings, chairs and accessories, rebars in service building, Brick work etc. as per specification and drawings; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete. (including cost of binding wire).  For Reservoir  For Control Room		25% 25%	20%		40%	15%				
C#06	For Control Room	L	20%	20%		40%	15%				

GWSP/LCB/C#06

		Pumping St	tation				
Item No.	Description	1	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		in INR	a	b	c1	c2	d
1.10	B/W in Control room						
	Providing & Construction of Brick masonry for super structure of 300 mm thick walls in CM (1:6) proplusing first class best quality table moulded bricks including cost and conveyance of all materials, labour, seaffolding, Curing etc., complet for finihised item of work as per specification and drawing and as directed by the Engineer-in-Charge						
	For Control Room		25%	20%		40%	15%
1.11	Plastering work					<del> </del>	
	Providing and applying plaster of 12mm thick in CM(1:4) prop. to ceiling, internal and external walls of control building, including cost and conveyance of all materials to site, scaffolding, screening of sand curing and labour charges etc, complete for finished item of work as per specification and drawing and as directed by the Engineer-in-charge.		25%	20%		40%	15%
1.12	Providing and placing in position suitable PVC water Stops confirming to IS:12200 for construction joints between two RCC members.		25%	20%		40%	15%
1.13	Flooring						
a	Providing and laying ceramic tile over concrete flooring with M:30 concrete laid to proper level and slope including compacting, finishing smooth and curing complete as per specification and drawing and as directed by the Engineer-in-charge.		25%	20%		40%	15%
			\$16.07 TO \$1.00 TO \$1				
1.14	Providing and fixing steel frame 14 inch Roof ventilator including complete in all respect including welding, painting, finishing etc. complete and as per specification and as directed by the Engineer-in-charge.		25%	20%		40%	15%



		Pumping St	tation	-			
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		In INK	a	b	c1	c2	d
1.15	Providing and erecting 3.0 m. high chain link fencing with chain link having hole size 65 mm x 65 mm supported on M.S. angle post of size 50 mm x 50 mm x 6 mm at 2.40 m c/c including excavating pits for foundation fixing post in M 20 concrete of size 45 cm x 45 cm x 45 cm fixing chain link with 3.25 mm (10 guage) G.I. wire at top and bottom and with oil paint etc. complete and Providing and fixing steel frame 4.0 m wide Double leaf Entrance gate (exterior) complete in all respect including welding, painting, finishing etc. complete and as per drawings and specification.		25%	20%		40%	15%
1.16	Water proofing on Roof						
	Providing and laying three layers of cold bituminous paint with two layers of polyester felt and gravel to roof and parapet walls for water proofing.						
a	For Reservoir		25%	20%		40%	15%
b	For Control Room		25%	20%		40%	15%
1.17	Painting		<del>                                     </del>				
a	Providing and applying priming coat on concrete/masonry/ surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required as per specification.		25%	20%		40%	15%
ь	Providing and applying Two coat waterproof cement based paint of approved make and shade over primer coat external surface to give an uniform shade including scaffolding, etc. complete.		25%	20%		40%	15%
С	Providing and applying Two coat Oil bond distamper of approved make and shade over primer coat internal surface to give an uniform shade including scaffolding, etc. complete.		25%	20%		40%	15%
d	Providing painting two coats over a primary coat with synthetic enamel paint of first quality of approved make to iron work including cost and covneyance of all materials like primer, synthetic enamel paint, sand paper, brushes etc, to site inleuding all taxes, all labour charges for preparation of the surface, painting etc., complete for finished item of work and as directed by the Engineer-in-charge		25%	20%		40%	15%

	Pumping Station						
Item No.	Description	(	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		in INR	a	b	c1	c2	d
1.18	Door and Window						
а	Providing and fixing steel frame 4.0 m wide Double leaf Entrance gate (exterior) complete in all respect including welding, painting, finishing etc. complete and as per drawings and specification		25%	20%		40%	15%
	Providing and fixing steel frame of door (Internal like Bathroom) including complete in all respect and size as per drawings and specification.		25%	20%		40%	15%
	a) Providing and fixing in position steel windows with openable / sliding aluminium frame, 5 mm thick plain sheet glass shutter, glazing clips / neoprene / rubber / PVC Gasket of approved quality, chromium plated brass wigs, other aluminium fixture and fastenings, handle, stopper etc. complete and as per drawings and specification.		25%	20%		40%	15%
1.19	Ladder and Hand rail						
	Providing, fabricating and fixing in position Stainless Steel ladder inside the reservoir including cost of material and labour involved, welding, cages, anchoring and applying with 2 coats of enamal paint over a cost of primer complete and as per drawings and specification and as directed by engineer- in charge.		25%	20%		40%	15%
b	Providing, fabricating and fixing in position stainless Hand rail (Horizontal as well as vertical poles) as per drawings and specification, fabricating and welding, grainding corners, fixing in position by making holes in the concreting and grouting in position with cement concrete M20 as per drawing and finishing for the exposed face with 2 coats of enamal paint over a cost of primer.		25%	20%		40%	15%
1.20	Paved area						
a	Providing, Laying, compacting Subgrade with selected job excavated material in paved area and access road within the fence line from existing subgrade to the underside of the base course as per drawings and specification.		25%	20%		40%	15%

GWSP/LCB/C#06

		Pumping St	ation				
Item No.	Description	I	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		in INR	a	b	c1	c2	đ
ь	Providing, Laying, compacting Base cource 500 mm thick in paved area and access road within fence line as per drawings and specification.		25%	20%		40%	15%
С	Providing, Laying, compacting asphalt concrete binder cource 50 mm thick of paved area as per drawings and specification.		25%	20%		40%	15%
d	Providing, Laying, compacting Asphalt concrete surface cource 30 mm thick of paved area as per drawings and specification.		25%	20%		40%	15%
1.21	Providing, Fixing and installation of all sanitary fixtures related Plumbing for the bath room / sanitation facilities with all accessories ISI marked fittings and Connections including cost of labour and material and preparation of plumbing shop drawings as per specification.		25%	20%		40%	15%
1.22	Providing, Fixing and installation of local water supply from the inlet valve chamber for the bathroom and reservoir cleaning. Inlet to Reservoir will be established on site.		25%	20%		40%	15%
1.23	Providing, Fixing and installation of Waste water pipe and manholes from the bathroom to the septic tank including cost of labour and material as per drawings and specifications.		25%	20%		40%	15%
1.24	Providing, Fixing and installation of Septic tank and absorption pit as per drawings and specification including cost of labour and material.		25%	20%		40%	15%
1.25	Providing and laying Storm water / roof drain system of the reservoir including Manholes. Rates also include excavation, concreting, shuttering, steel, specials, pipes, fittings, etc complete in all respect as per drawings and specification.		25%	20%		40%	15%
1.26	Providing and laying 300 mm dia Pipe to washout and headwall including labour, material etc complete in all respect as per drawings and specification.		25%	20%		40%	15%
			<u> </u>	<u> </u>			

		Pumping St	ation				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			a	b	c1	c2	d
1.27	To Clean reservoir, supply Potable water, including Transportation, Equipment, Manpower, Level measuring device fill reservoir and perform leakage testing of Reservoir (Hydro test) as per specification for water tightness including cleaning Reservoir full after disinfection.						
a	Reservoir		25%	20%		40%	15%
b	All yard piping		25%	20%		40%	15%
1.28	To supply manpower, equipment, chemicals, testing and disinfect the reservoir including all inlet, outlet, piping according as per specification.						
a	Reservoir		1. 1	20%		40%	15%
b	All yard piping		25%	20%		40%	15%
1.29	Supplying all materials etc. and constructing culvert crossing including boulders at inlet and outlet but excluding asphalt surface per drawing and specification and as directed by Engineer- in-charge.		25%	20%		40%	15%
1.30	Supply and install polyethylene sheeting between gravel and PCC under reservoir (sump) and control building.		25%	20%		40%	15%
1.31	Supply and install building paper/boind breaker between reservoir (sump) and service building		25%	20%		40%	15%
1.32	Supply and install Type A traffic barrier		.25%	20%		40%	15%
1.33	Supply and install poluurethane joint sealant between reservoir (sump) and control building.		25%	20%		40%	15%
1.34	Supply and install external access ladder (steel) pre standard drawings, with two coats (minimum) anticorrosion paint and final deorative coat – color to be agreed with client.	i e	25%	20%		40%	15%
1.35	Supply and install roof vent per standard drawings		25%	20%		40%	15%
1.36	Supply and install 6mm steel plate bolted in place over slots for future pumps						
1.37	Supply and install access hatch to sump per standard drawings						
	SUB TOTAL						·
	1001						

		Pumping St	ation				
Item No.	Description		Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		in INR	а	b	c1	c2	d
2.0 ME	CHANICAL WORKS						
	Supplying & installing Mechanical Equipment including, but no limited to, safe storage, protection, erection, installation, pre-commissioning & commissioning testing as per specification and drawing for following items.						
2.01	Pump & Motor						
	Providing, Fixing, installation and comissioning & third party inspection of Vertical Turbine pump including Motor in all respect as per specification and drawings.		, 25%	3.75%	63.75%	0%	7.5%
2.02	Inlet pipes					<del></del>	
	Supplying, installing, commissioning & third party inspection of 300ø Dl inlet pipe from fence line to the bell mouth inside the Reservoir. Butterfly valve, pipe supports, bell mouth, sleeve coupling etc complete in all respect and as per specification and Drawings.		25%	3.75%	63.75%	0%	7.5%
2.02							
2.03	Out let pipes supplying, installing, commissioning & third party inspection of 300ø Dl Outlet pipe from bell mouth in Reservoir to fence line including fittings, Butterfly valve, specials like EMF Meter, Wall piece, Well mouth, Tee, pipe support, Reducer Sleeve coupling etc complete in all respect and as per specification and drawings.		25%	3.75%	63.75%	0%	7.5%
2.04	Wash out pipes						
	supplying, installing, commissioning of Wash out pipe from Washout sump in the Reservoir to Washout manhole including all fittings, conc. encasement etc complete in all respect and as per specification and drawings.		25%	3.75%	63.75%	0%	7.5%
2.05	Over Flow						
2.00	supplying, installing, commissioning of Reservoir over flow from inside Reservoir to Manhole including all fittings etc complete in all respect and as per specification and drawings.		25%	3.75%	63.75%	0%	7.5%

		Pumping St	ation			~	
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		III IIVIX	a	b	c1	c2	d
2.06	Inlet valve chamber						
	Supplying, fixing and installation in position true to line and level, inlet valve chamber and its contents and related fitting and associated valves, ball valve, sleevecouplings, exeavation, concreting, shuttering, steel and specials and pipe support, rungs, etc complete in all respect and as per drawing and specification.		25%	3.75%	63.75%	0%	7.5%
2.07	Supplying, installing, commissioning of Wash out/Overflow/Storm water pipe from fenceline to offsite disposal point including all fittings, conc. encasement etc complete in all respect and as per specification. (See site plan for pipe size)		25%	3.75%	63.75%	0%	7.5%
	SUB TOTAL				<u> </u>		
3. ELE	CTRICAL SYSTEM						
Service	Buildings Internal Lighting System						
	Manufacturing, inspection, delivery, installation, testing, commissioning of Lighting Distribution Board (DB)						
a	4 Way		25%	3.75%	63.75%	0%	7.5%
ь	12 Way		25%	3.75%	63.75%	0%	7.5%
3.02	Providing & Fixing, Testing and comissioning of industrial fluorescent tube fitting with reflector fabricated from CRCA sheet and finished with powder coating / stove enamelled paint complete with accessories like Electronic Ballast, starter, terminal block duly prewired with copper conductor including making connection, testing etc. as required.						114111
a	2 X 28 Watts T5 Jamp		25%	3.75%	63.75%	0%	7.5%
b	1 X 28 Watts T5 lamp		25%	3.75%	63.75%	0%	7.5%
С	Providing & Fixing, Testing and comissioning of Bulk Head fittings along with 100 W lamp		25%	3.75%	63.75%	0%	7.5%
d	Providing & Fixing, Testing and comissioning of Switches, Junction boxes, Ceiling rose, modular fittings for switches & sockets, Receptacles etc on as required basis		25%	3.75%	63.75%	0%	7.5%.
L			l				78.7

		Pumping S	tation			·	
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		In INK	а	b	c1	c2	d d
3.03	Providing & Fixing, Testing and comissioning of double ball bearing capacitor start ceiling fan of approved make complete with regulator and other accessories as required.	l					1.
a	1200 mm sweep		25%	3.75%	63.75%	0%	7.5%
Ь	1400 mm sweep		25%	3.75%	63.75%	0%	
3.04	Point Wiring along with heavy duty PVC conduit complete with fittings, clasmps, nut bolts, etc.						
a	(a) Short point (upto 3m)		25%	3.75%	63.75%	0%	7.5%
Ь	(b) Medium point (upto 6m)		25%	3.75%	63.75%	0%	7.5%
3.05	Pipe Earthing for SB's as per IS:3043 with perforated 3.0 Mtr. Long, 40 mm dia. 'B' class G.I. Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300 mm and embodying the pipe complete with alternate layers salt and coke/charcoal, testing of earth resistance as required.	<u> </u>	25%	3.75%	63.75%	0%	7.5%
3.06	Supply & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.						
а	8 SWG G.l. Wire		25%	3.75%	63.75%	0%	7.5%
3.07	Providing & Fixing, Testing and comissioning of metal clad industrial plug top & socket unit with pin and sleeve type contact on porcelain/ Bakelite base in sheet steel enclosure with MCB including making connections with lugs, testing etc.as required for use as welding socket.						
a	Three phase (Five pin) 20A		25%	3.75%	63.75%	0%	7.5%

		Pumping St	ation				-
Item No.	Description	1	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
		in INR	a	ь	c1	c2	d
	Buildings Out-Side Lighting System						
1	Supply, erection, Testing and comissioning of 7 mtr high Mild steel swaged tubular pole conforming to IS: 2713-1980 (part I to II) with galvanised base plate of size 400mm x 400mm x 7mm in position including excavation of the pit and filling the same with C.C. of M-10 grade (1:3:6) from base plate to 50cm above ground level, with the help of steel frame not less than 40 cm dia up to 114.3mm outer dia and 50 cm beyond 114.3mm outer dia around the pole. Duly finished with cement plaster, earthing terminals, cable entry, GI cable sleeve complete as required. The pole shall be galvanised using ISI mark seamless tube for structural purpose.		25%	3.75%	63.75%	0%	7.5%
3.09	Supply, crection, Testing and comissioning of IP-54 protected street light luminaire suitable for HPSV/ MH lamp, made out from powder coated single piece die cast aluminium housing, electrochemically brightened and anodized POT optics aluminium reflector, UV stabilised acrylic bowl cover/toughened glass cover and accessories like copper ballast, electronic ignitor, capacitor, holder prewired up to terminal block etc. as required including making connection testing etc. as required.		·				
a	70 Watt HPSV		25%	3.75%	63.75%	0%	7.5%
ь	150 Watt HPSV		25%		63.75%	0%	7.5%
3.10	Supply, erection, Testing and comissioning IP65 protected decorative lighting luminaire Post top suitable for following lamps, made of powder coated east aluminium housing, moulded acrylic lamp compartment with built in anodized aluminium louvers for lamp shielding and glare control, metallic lid top cover, including the cost of control gear complete in all respect. Bollards are including cost of decorative base pipe/ plate.						
a	70 Watt HPSV	<del></del>	25%	3.75%	63.75%	0%	7.5%

		Pumping St	ation				
Item No.	Description	Basic Amount in INR	Non-adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			a	b	c1	c2	d
	Supply & Laying XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor armoured of IS:7098-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, Ind class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size						
a	4/CX 25 mm <sup>2</sup>		25%	3.75%	63.75%	0%	7.5%
	4/CX 16 mm <sup>2</sup>		25%		63.75%	0%	
3.12	Supplying and making end terminations with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/XLPE aluminium conductor cable of 1100 volt grade as required of size.						
a	4/CX 25 mm <sup>2</sup>		25%	3.75%	63.75%	0%	7.5%
ь	4/CX 16 mm <sup>2</sup>		25%	3.75%	63.75%	0%	7.5%
3.13	Feeder Pillar		25%	3.75%	63.75%	0%	7.5%
	SUB TOTAL						
	GRAND TOTAL		<u> </u>				



(V) - The Particular Conditions (PC)



The following Particular Conditions shall supplement the GC. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

### Part A - Contract Data

Conditions	Sub-Clause	Data
Employer's name and address	1.1.2.2 & 1.3	The Employer is: Guwahati Metropolitan Development Authority, Government of Assam, Guwahati, Assam, India.
Engineer's name and address	1.1.2.4 & 1.3	The Chief Executive Officer (CEO), JICA ODA Loan Project, Guwahati Metropolitan Development Authority, 3 <sup>rd</sup> Floor, STATFED Building, G.M.C.H Road, Bhangagarh, Guwahati-781005, Assam, India. Tel.: +91 361 2529650, Fax: +91 361 2529991 Project Management Consultant (PMC) 1st Bylane Lichubari, Near Ganesh Mandir Higher Secondary School, Six Mile, Khanapara, Guwahati – 781022, Assam, India Tel No. +91 361 23630077
Bank's name	1.1.2.11	The Incorporated Administrative Agency-Japan International Cooperation Agency (JICA)
Borrower's name	1,1,2,12	Government of India
Time for Completion	1,1.3.3	The Time for Completion of the whole of the Facilities shall be <b>36</b> (Thirty Six) months from the Effective Date as described in the Contract Agreement. The whole of the Works, including Testing, Trial Run and Commissioning Test shall be completed within the period specified above. The Taking-Over Certificate will be issued upon successful completion of the Tests on Completion as per Clause 9 and rectification of any defects observed during this period.
<b>Defects Notification Period</b>	1.1.3.7	365 days
Sections	1.1.5.6	N/A
Electronic transmission systems	1.3	N/A
Governing Law	1.4	The Contract shall be interpreted in accordance with the laws of Assam and India. The Jurisdiction shall be the territory of Union of India.
Ruling language	1.4	English
Language for communications	1.4	English
Time for access to the Site	2.1	15 (Fifteen) days after Commencement Date
Engineer's Duties and Authority	3.1(b)(ii)	Variations resulting in an increase of the Accepted Contract Amount in excess of Five percent (5%) shall require approval of the Employer.
Performance Security	4.2	The performance security will be in the amount(s) of Ten percent (10%) of the Accepted Contract Amount and in the same currericy (ies) of the Accepted Contract Amount. The performance security shall be in the form of the Unconditional Guarantee attached hereto in the section on Sample Forms and Procedures, issued by Nationalized or Scheduled Bank located in India acceptable to the Employer. The issuing branch of such bank shall be located in India, and the bank guarantee shall, if invoked, be encashable when presented in the branch office of such bank located in Guwahati, Assam, India. When providing such security to the Employer, the Contractor shall notify the Employer's Representative of so doing.
Normal working hours	6.5	Normal working hour shall be: 8 AM to 6 PM. Night working with the permission of Engineer during construction phase
Delay damages for the Works	8.7 & 14.15(b)	0.05% of the Contract Price per day.
Maximum amount of delay damages	8.7	10% of the final Contract Price.
Provisional Sums	13.5.(b)(ii)	NA
Adjustments for Changes in	13.8	Delete GC 13.8 and replace with Annexure 2
GWSP/LCB/C#06		Page 1 of 10

GWSP/LCB/C#06

14.2

**Total advance payment** 

a) Ten percent (10%) of the total contract price as an advance

Total advance payment	14.2	payment against an irrevocable advance payment security for the equivalent amount made out in favour of the Employer.	,
		b) The advance shall be recovered in 18 nos, equal monthly instalment, with first instalment commencing from the 7 <sup>th</sup> month from the Effective Date. In case no interim payment is made in a particular month after 7 <sup>th</sup> month, the recovery from the interim payment made in any particular month shall be equivalent to commutative recovery due but not made in proceeding month.	 
		100% of the advance payment shall stand recovered by the end of 24 <sup>th</sup> month after the scheduled date of start or 85% progressive payment of contract amount, whichever is earlier. In case of default to repay the advance payment awaited by the end of 24 <sup>th</sup> month, the mobilization advance would stand recovered in full by encashment of BGs.	;
Percentage of Retention	14.3	5 %	
Limit of Retention Money	14.3	5 % of the Accepted Contract Amount	
Plant and Materials	14.5(b)(i)	NA	
	14.5(c)(i)	Plant and Materials for payment when delivered to the Site : Pipe apprehended valves, and specials, pumps, motors and electrical equipments.	
Minimum Amount of Interim Payment Certificates	14.6	1% of the Accepted Contract Amount.	
Maximum total liability of the Contractor to the Employer	17.6	The product of 1.0 times the Accepted Contract Amount.	
Periods for submission of insurance:	18.1		
a. evidence of insurance.		28 (Twenty-eight) days	
b. relevant policies		28 (Twenty-eight) days	
Maximum amount of deductibles for insurance of the Employer's risks	18.2(d)	Nill	
Minimum amount of third party insurance	18.3	INR 1 million	
Date by which the DB shall be appointed	20.2	45 days from the commencement date	
The DB shall be comprised of	20.2	Three Members	
List of potential DB sole members	20.2	None	
Appointment (if not agreed) to be made by	20.3	The Employer	
Rules of arbitration	20.6	Any dispute not settled amicably and in respect of which the decision by DB (if any) has not become final and binding shal be finally settled by arbitration. The aggrieved party may approach the Indian Council of Arbitration, within 90 days from the date of the decision by DB, for settlement of dispute or difference by the sole arbitrator to be appointed by the	

Ш difference by the sole arbitrator to be appointed by the appropriate authority of the said council. The settlement of dispute by arbitration shall be in accordance with the following provisions:

- Selection of Arbitrators: Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three arbitrators, in accordance with the following provisions:
  - Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator.
  - Where the Parties do not agree that the dispute concerns a technical matter, the Employer and the Consultants shall each appoint one arbitrator, and these two arbitrator shall jointly appoint a third arbitrator, who shall chair the arbitration panel.



- Rules of Procedures: All rules will be based on The Indian Arbitration & Conciliation Act, 1996.
- 3. <u>Substitute Arbitrators:</u> If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.
- 4. Qualifications of Arbitrators: The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) and (b) of Clause 20.6-1 hereof shall be an internationally recognized legal or technical expert with extensive experience in relation to the matter in dispute.
- 5. Miscellaneous: In any arbitration proceeding hereunder:
  - Proceedings shall, unless otherwise agreed by the Parties, be held in Guwahati;
  - The English language shall be the official language for all purposes; and

The decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

Table: Summary of Sections

Section Name/Description (Sub-Clause 1.1.5.6)	Time for Completion (Sub-Clause 1.1.3.3)	
N/A	N/A	N.A

## Part B - Specific Provisions

Sub-Clause 1.15 Inspections and Audit by the Bank This Sub-Clause is deleted entirely.

Sub-Clause 2.4 Employer's Financial Arrangements Financial arrangement is Japanese ODA Loan of amount 29,453 million Japanese Yen. The Ioan Agreement was signed on March 31, 2009

Sub-Clause 4.18 Protection of the Environment The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein, comply with all provisions in the Loan Agreement between the Bank and the Borrower with respect to the protection of the environment.

Sub-Clause 8.1
Commencement of Works

Sub-paragraph (b) deleted entirely

Sub-Clause 14.1
The Contract Price

Bidders are informed that certain tax and duty exemptions are available as per the following GOI notifications:

- a) In accordance with Notification No. 108/95–CE dated 28.8.1995 (Goods Supplied to UN or an International Organization) and subsequent amendments, the Central Government has granted exemptions for all goods falling under the Schedule to the Central Excise Tariff Act 1985 when supplied to projects financed by Japan International Cooperation Agency and approved by the Government of India from the whole of (1) the duty of excise leviable thereon under Section 3 of the Central Excise Act, 1944 (1 of 1944), and (2) the additional duty of excise leviable thereon under Sub-Section (1) of Section 3 of the Additional Duties of Excise (Goods of Special Importance) Act, 1957 (58 of 1957), provided that the need for such goods are properly certified by the appropriate authorities.
- b) In addition, as per Notification No. 84/97-Cus. dated 11.11.1997 and subsequent amendments, and under General Exemption No. 1A, Exemptions to Imports by United Nations or International Organization for Execution of Projects in India, the Central Government has granted exemptions for all goods imported into India for execution of projects financed by an International Organization and approved by the Government of India, from (1) the whole of the duty of customs leviable thereon under First Schedule to the Customs Tariff Act, 1975 (51 of 1975), (2) the whole of the additional duty of customs leviable thereon under Section 3 of the said Act, and (3) the whole of the special duty of customs leviable under Section 68 of the Finance (No. 2) Act 1996 (33 of 1996), provided that the need for such goods is properly certified by the appropriate authorities.

Sub-Clause 16.2 Termination by Contractor Sub-paragraph (a) is deleted].

Sub-Clause 20.2 Appointment of the Dispute Board No change.

# Annexure -1 Terms and Procedures of Payment Payment Schedule for Interim Valuations

In accordance with the provisions of GC Clause 14 (Contract Price and Payment), the Employer shall pay the Contractor in the following manner and at the following times, on the basis of the price Breakdown given in the section on Price Schedule. Payments will be made in the currencies quoted by the Bidder unless otherwise agreed between the parties. Application for payment in respect of part deliveries may be made by the Contractor as work proceeds.

#### (A) Terms of Payment

#### Advance Payment:

- a) Ten percent (10%) of the total contract price as an advance payment against an irrevocable advance payment security for the equivalent amount shall be made out in favour of the Contractor.
- b) Advance payment shall be recovered in 18 equal monthly instalments, with the first instalment commencing from the 7<sup>th</sup> month from the Effective Date. In case no interim payment is made in a particular month after 7<sup>th</sup> month, the recovery from the interim payment made in any particular month shall be equivalent to cumulative recovery due to but made in proceeding month.

  100% of the advance payment shall stand recovered by the end of 24<sup>th</sup> month after the scheduled date of start or 85% progress payment of contract amount whichever is earlier. In case of default to repay the advance payment awaited by the end of 24<sup>th</sup> month, the mobilization advance would stand recovered in full by encashment of Bank Guarantees.

In respect of pipe materials, installation and all civil works, payment for the following items shall be made as:

#### 1. Earthwork

- a) Ninety Five percent (95%) of the total accepted price of the item upon the progress achieved for the relevant item.
- b) Five percent (5%) of the total accepted price of the item upon completion of cleanup, removal of debris and Contractor's equipment and materials, final grading and restoration of the site(s).

## 2a. D.I. Pipeline (Employer Furnished)

One Hundred percent (100%) of the total accepted price of the item upon successful completion of the relevant item and commissioning.

# 2b. MS Pipeline, HDPE Pipeline, Pumps, Motors, Electrical Equipments and All Specials (Contractor Furnished)

- a) Eighty five percent (85%) of the total accepted price for the item upon supply, delivery to the site, proper storage and acceptance of the relevant item.
- b) Fifteen percent (15%) of the total accepted price of the item upon successful completion of the installation of the relevant item, and commissioning.

## 3. Valves and Appurtenances (Contractor Furnished)

- a) Eighty five percent (85%) of the total accepted price for the item upon supply, delivery to the site, proper storage and acceptance of the relevant item.
- b) Fifteen percent (15%) of the total accepted price of the item upon successful completion of the installation of the relevant item, and commissioning.

#### 4. Valve Chamber

- a) Ninety Five percent (95%) of the total accepted price of the item upon the progress achieved for the relevant item.
- b) Five percent (5%) of the total accepted price of the item upon completion of cleanup, removal of debris and Contractor's equipment and materials, final grading and restoration of the site(s).

## 5. Pipe Jacking (If Applicable)

- a) Fifty percent (50%) of the total accepted price for the item upon construction of the Jacking pits, the set-up of Jacking Equipment and supply, delivery and storage of the M.S. Casing Pipe.
- b) Fifty percent (50%) of the total accepted price of the item upon successful completion of pipe jacking, removal of the Jacking Equipment, and all other activities as per item description.

## 6. Testing, Trial Runs and Commissioning

 a) Hundred percent (100%) of the total accepted price of the item upon progress achieved for the relevant item.

7. Road Restoration

GWSP/LCB/C#06/

Chief Executive Office#

Page **5** of **10** 

- a) Ninety Five percent (95%) of the total accepted price of the item upon the progress achieved for the relevant item.
- b) Five percent (5%) of the total accepted price of the item upon completion of cleanup, removal of debris and Contractor's equipment and materials, final grading and restoration of the site(s).

#### 8. Sump and Pump House and Miscellaneous Civil Works

- a) Ninety Five percent (95%) of the total accepted price of the item upon the progress achieved for the relevant item.
- b) Five percent (5%) of the total accepted price of the item upon completion of cleanup, removal of debris and Contractor's equipment and materials, final grading and restoration of the site(s).

#### 9. Survey Work

- a) Eighty percent (80%) of the total accepted price for the item upon submission and approval by the Employer's Representative of the preliminary survey drawings and CADD files.
- b) Twenty percent (20%) of the total accepted price of the item upon submission and approval by Employer's Representative of the final survey drawings and CADD files.

#### Retention

Monthly payment in accordance with the work progress measured and approved by the Employer's Representative with reduction of Five percentage (5%) for retention money.

Retention money of Five percentage (5%) upon successful completion of the work and commissioning upon issue of the Work Contract Completion Certificate, including rectifying any defects observed during this period.

#### **Provisional Sum Items**

As per Requirement

100%-Payment in full upon production of receipts for any approved expenditures

#### Day work

As per Requirement

100% - Payment in full upon the providing of labor, materials and equipment as requested and witnessed by the Employer's Representative.

Sec Value

#### (B) Payment terms and Procedures

The Procedures to be followed in applying for certification and making payment shall be as follows:

- All payments shall be made within 45 days after receiving invoices of appropriate elements in the price schedule, after due check by accounts & audit by the Accounts Section of Employer's representative's Office, and corrections as deemed fit for justified reasons.
- All payments shall be treated as advances till settlement of Final Account & Billing and in the event of any over payments or wrong payments are noticed the same shall be adjusted or recovered forthwith, from the Contractor, from any amount due to him.
- 3. The mobilization advance shall not carry any interest
- 4. An interest of 4% (Four percent) per annum is payable by the Employer if the disbursement of payment is delayed beyond 60 days.
- The payments will be as certified by the Employer's Representative and as per disbursement procedure of JICA ODA Loan.

#### Annexure 2. Price Adjustment

#### Sample Price Adjustment Formula

Prices payable to the Contractor, in accordance with the Contract, shall be subject to adjustment during performance of the Contract to reflect changes in the cost of labor and material components, in accordance with the following formula:

$$P1 = P0 \times (a + b\frac{L_1}{L_0} + c_1 \frac{MS_1}{MS_0} + c_2 \frac{MA_1}{MA_0} + d\frac{E_1}{E_0}) - P_0$$

in which:

P<sub>1</sub> = adjustment amount payable to the Contractor

P<sub>n</sub> = Contract Price (base price)

a = fixed element representing profit and overhead in Contract Price (a = \_\_ %)

b = estimated percent of labor portion in Contract Price (b = \_\_ %)

c<sub>1</sub> = estimated percent of material portion (Steel) in Contract Price (c<sub>1</sub> = \_\_ %)

 $c_2$  = estimated percent of material portion (other material) in Contract Price ( $c_2 = _{-}\%$ )

d = estimated percent of plant & equipment component in Contract Price (d = \_\_ %)

L<sub>0</sub>, L<sub>1</sub> = cost index for labor indexes applicable to the appropriate industry in the country of origin on the base date and the date for adjustment, respectively

MS<sub>0</sub>, MS<sub>1</sub> = cost index for the raw materials i.e. steel in the country of origin on the base date and the date for adjustment, respectively

MA<sub>0</sub>, MA<sub>1</sub> = cost index for the major raw materials i.e. other than steel in the country of origin on the base date and the date for adjustment, respectively

E<sub>0</sub>, E<sub>1</sub> = cost indexes for equipment operation i.e. fuel and lubricants in the country of origin on the base date and the date for adjustment, respectively

The sum of the five coefficients a, b, c<sub>1</sub>, c<sub>2</sub> and d shall be one (1) in every application of the formula.

Chief Executive Officer

Guwahati Metrosofficer

## Schedule of Adjustment Data

Adjustments for Changes in Cost and Legislation – Price Adjustment	Symbol	Price Adjustment Factors as Provided Below:			
Factors		(Bidder shall specify sources of cost indices where these are not specified below)			
For costs incurred in India and/or paid in Indian Rupees:					
Cost Index for Labour	L	The Consumer Price Index for Industrial Workers for the month in which the adjustment date falls, published by Government of India Ministry of Labour & Employment, Labour Bureau for Guwahati.			
		(Base : 2001 = 100)			
Cost Index for Materials, other than steel	MA	The average wholesale price index for all commodities for the month in which the adjustment date falls, as published by the Reserve Bank of India for India (Base: 1993-94 = 100)			
<ul> <li>Cost Index for Materials - steel (applicable only for steel supplied for pipe manufacture and structural reinforcing bars)</li> </ul>	MS	The average wholesale price index for iron and steel for the month in which the adjustment date falls, as published by the Reserve Bank of India for India (Base: 1993-94 = 100)			
Cost Index for Equipment Operation (fuel and lubricants)	Е	The average wholesale price index for fuel, power, light and lubricants for the month in which the adjustment date falls, as published by the Reserve Bank of India for India (Base: 1993-94 = 100)			
For costs incurred outside India and	lor paid in Fo	oreign Currency:			
Cost index for Labour	L	(Bidder to specify source of Index and provide copy of the most recent Cost Index along with the Bid)			
Cost Index for Materials, other than steel	MA	(Bidder to specify source of Index and provide copy of the most recent Cost Index along with the Bid)			
<ul> <li>Cost Index for Materials - steel (applicable only for steel supplied for pipe manufacture and structural reinforcing bars)</li> </ul>	MS	(Bidder to specify source of Index and provide copy of the most recent Cost Index along with the Bid)			
Cost Index for Equipment Operation (fuel and lubricants)	E	(Bidder to specify source of Index and provide copy of the most recent Cost Index along with the Bid)			



		100 Bullion	(Materials Portion)			
Coefficients:	a (Non-adjusta ble Portion)	b (Labor Portion) (L)	c <sub>1</sub> Steel (MS)	C <sub>2</sub> Other Materials (MA)	d (Equipment Operation Portion) (E)	
Supply and Delivery of Materials to	be Incorporate	d into the Pe	ermanent W	orks:		
<ul> <li>For supply and deliver to the Site of Pipes, valves, fitting, pumps &amp; electrical equipments and accessories of Mild Steel Pipe &amp; HDPE Pipes.</li> </ul>	25%					
Installation and Other Services						
For installation, testing, training, trial run and commissioning services	100%					
Civil Works						
<ul> <li>Installation of sump and pump house, Distribution mains including valve chamber, thrust block, river &amp; railway crossing etc</li> </ul>	25%					
General Civil Works, including site development works, roads and drains, etc., but excluding those works described in the following paragraphs.	25%					

Note: The weight of each adjustment factor (other than column a) is to be set by the bidder.



#### **Conditions Applicable To Price Adjustment**

The Bidder shall indicate the source of labour and materials indexes and the base date indexes in its bid.

The base date shall be the date twenty-eight (28) days prior to the Bid closing date.

The date of adjustment shall be the mid-point of the period of manufacture or installation of component or Plant and Equipment.

The following conditions shall apply:

- (a) Price adjustment will be applied only if the resulting increase or decrease is more than two percent (2%) of the Contract Price.
- (b) No price increase will be allowed beyond the original delivery date unless covered by an extension of time awarded by the Employer under the terms of the Contract. No price increase will be allowed for periods of delay for which the Contractor is responsible. The Employer will, however, be entitled to any price decrease occurring during such periods of delay.
- (c) If the currency in which the Contract Price,  $P_0$  is expressed is different from the currency of the country of origin of the labor and/or materials indexes, a correction factor will be applied to avoid incorrect adjustments of the Contract Price. The correction factor shall correspond to the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.
- (d) No price adjustment shall be payable on the portion of the Contract Price paid to the Contractor as an advance payment.





(VI) - THE GENERAL CONDITIONS (GC)



## **Table of Clauses**

1,	Gene	rai Provisions	2			
	1.1	Definitions	2			
	1.2	Interpretation	5			
	1.3	Communications	5			
	1.4	Law and Language	6			
	1.5	Priority of Documents	6			
	1.6	Contract Agreement	6			
	1.7	Assignment	6			
	1.8	Care and Supply of Documents	7			
	1.9	Delayed Drawings or Instructions	7			
	1.10	Employer's Use of Contractor's Documents	7			
	1.11	Contractor's Use of Employer's Documents	8			
	1.12	Confidential Details	8			
	1.13	Compliance with Laws	8			
	1.14	Joint and Several Liability	8			
	1.15	Inspections and Audit by the Bank	8			
2.	The E	mployer	9			
	2.1	Right of Access to the Site	9			
	2.2	Permits, Licences or Approvals	9			
	2.3	Employer's Personnel	9			
	2.4	Employer's Financial Arrangements	9			
	2.5	Employer's Claims	.10			
3.	The E	The Engineer				
	3.1	Engineer's Duties and Authority	.10			
	3.2	Delegation by the Engineer	.11			
	3.3	Instructions of the Engineer	.12			
	3.4	Replacement of the Engineer	.12			
	3.5	Determinations	.12			
4.	The C	ontractor	.12			
	4.1	Contractor's General Obligations	. 12			
	4.2	Performance Security	.13			
	4.3	Contractor's Representative	.14			
	4.4	Subcontractors	.14			
	4.5	Assignment of Benefit of Subcontract	.14			
	4.6	Co-operation	.15			
	4.7	Setting Out	.15			
	4.8	Safety Procedures	.15			
	4.9	Quality Assurance	.16			
	4.10	Site Data	.16			
	4.11	Sufficiency of the Accepted Contract Amount	. 16			
	4.12	Unforeseeable Physical Conditions	.16			
	4.13	Rights of Way and Facilities	.17			
	4.14	Avoidance of Interference	. 17			
	4.15	Access Route	.17			
	4.16	Transport of Goods				
	4.17	Contractor's Equipment				
	4.18	Protection of the Environment				
	4.19	Electricity, Water and Gas	18			
	4.20	Employer's Equipment and Free-Issue Materials				
		HM				

	4.21	Progress Reports	19
	4.22	Security of the Site	20
	4.23	Contractor's Operations on Site	20
	4.24	Fossils	20
5.	Nomir	nated Subcontractors	20
	5.1	Definition of "nominated Subcontractor"	20
	5.2	Objection to Nomination	21
	5.3	Payments to nominated Subcontractors	21
	5.4	Evidence of Payments	21
6.	Staff a	and Labour	21
	6.1	Engagement of Staff and Labour	21
	6.2	Rates of Wages and Conditions of Labour	22
	6.3	Persons in the Service of Employer	22
	6.4	Labour Laws	22
	6.5	Working Hours	22
	6.6	Facilities for Staff and Labour	22
	6.7	Health and Safety	
	6.8	Contractor's Superintendence	
	6.9	Contractor's Personnel	
	6.10	Records of Contractor's Personnel and Equipment	
	6.11	Disorderly Conduct	
	6.12	Foreign Personnel	
	6.13	Supply of Foodstuffs	
	6.14	Supply of Water	
	6.15	Measures against Insect and Pest Nuisance	
	6.16	Alcoholic Liquor or Drugs	
	6.17	Arms and Ammunition	
	6.18	Festivals and Religious Customs	
	6.19	Funeral Arrangements	
	6.20	Prohibition of Forced or Compulsory Labour	
	6.21	Prohibition of Harmful Child Labour	
		Employment Records of Workers	
-	6.22	, Materials and Workmanship	
7.		Manner of Execution	
	7.1		
	7.2	Samples	
	7.3	Inspection	
	7.4	Testing	
	7.5	Rejection	
	7.6	Remedial Work	
	7.7	Ownership of Plant and Materials	
	7.8	Royalties	
8.		mencement, Delays and Suspension	
	8.1	Commencement of Works	
	8.2	Time for Completion	
	8.3	Programme	
	8.4	Extension of Time for Completion	28
	8.5	Delays Caused by Authorities	28
	8.6	Rate of Progress	
	8.7	Delay Damages	29
	8.8	Suspension of Work	29

	8.9	Consequences of Suspension	29
	8.10	Payment for Plant and Materials in Event of Suspension	29
	8.11	Prolonged Suspension	30
	8.12	Resumption of Work	30
9.	Tests	on Completion	30
	9.1	Contractor's Obligations	30
	9.2	Delayed Tests	30
	9.3	Retesting	30
	9,4	Failure to Pass Tests on Completion	30
10.	Emplo	yer's Taking Over	31
	10.1	Taking Over of the Works and Sections	31
	10.2	Taking Over of Parts of the Works	31
	10.3	Interference with Tests on Completion	32
	10.4	Surfaces Requiring Reinstatement	32
11.	Defect	s Liability	32
	11.1	Completion of Outstanding Work and Remedying Defects	32
	11.2	Cost of Remedying Defects	33
	11.3	Extension of Defects Notification Period	33
	11.4	Failure to Remedy Defects	33
	11.5	Removal of Defective Work	33
	11.6	Further Tests	33
	11.7	Right of Access	34
	11.8	Contractor to Search	34
	11.9	Performance Certificate	34
	11.10	Unfulfilled Obligations	34
	11.11	Clearance of Site	34
12.	Measu	rement and Evaluation	34
	12.1	Works to be Measured	34
	12.2	Method of Measurement	35
	12.3	Evaluation	35
	12.4	Omissions	36
13.	Variati	ions and Adjustments	36
	13.1	Right to Vary	36
	13.2	Value Engineering	36
	13.3	Variation Procedure	37
	13.4	Payment in Applicable Currencies	37
	13.5	Provisional Sums	37
	13.6	Daywork	38
	13.7	Adjustments for Changes in Legislation	38
	13.8	Adjustments for Changes in Cost	38
14.	Contra	act Price and Payment	40
	14.1	The Contract Price	40
	14.2	Advance Payment	40
	14.3	Application for Interim Payment Certificates	41
	14.4	Schedule of Payments	41
	14.5	Plant and Materials intended for the Works	42
	14.6	Issue of Interim Payment Certificates	43
	14.7	Payment	
	14.8	Delayed Payment	
	14.9	Payment of Retention Money	

	14.10	Statement at Completion	44
	14.11	Application for Final Payment Certificate	45
	14.12	Discharge 45	
	14.13	Issue of Final Payment Certificate	45
	14.14	Cessation of Employer's Liability	45
	14.15	Currencies of Payment	46
15.	Termi	nation by Employer	46
	15.1	Notice to Correct	46
	15.2	Termination by Employer	46
	15.3	Valuation at Date of Termination	47
	15.4	Payment after Termination	47
	15.5	Employer's Entitlement to Termination for Convenience	48
	15.6	Corrupt or Fraudulent Practices	48
16.	Suspe	ension and Termination by Contractor	48
	16.1	Contractor's Entitlement to Suspend Work	48
	16.2	Termination by Contractor	49
	16.3	Cessation of Work and Removal of Contractor's Equipment	49
	16.4	Payment on Termination	50
17.	Risk a	nd Responsibility	50
	17.1	Indemnities	50
	17.2	Contractor's Care of the Works	50
	17.3	Employer's Risks	51
	17.4	Consequences of Employer's Risks	51
	17.5	Intellectual and Industrial Property Rights	51
	17.6	Limitation of Liability	52
	17.7	Use of Employer's Accomodation/Facilities	52
18.	Insura	ınce	52
	18.1	General Requirements for Insurances	52
	18.2	Insurance for Works and Contractor's Equipment	53
	18.3	Insurance against Injury to Persons and Damage to Property	54
	18.4	Insurance for Contractor's Personnel	55
19.	Force	Majeure	55
	19.1	Definition of Force Majeure	55
	19.2	Notice of Force Majeure	56
	19.3	Duty to Minimise Delay	56
	19.4	Consequences of Force Majeure	56
	19.5	Force Majeure Affecting Subcontractor	56
	19.6	Optional Termination, Payment and Release	56
	19.7	Release from Performance	57
20.	Claim	s, Disputes and Arbitration	57
	20.1	Contractor's Claims	57
	20.2	Appointment of the Dispute Board	58
	20.3	Failure to Agree on the Composition of the Dispute Board	59
	20.4	Obtaining Dispute Board's Decision	59
	20.5	Amicable Settlement	60
	20.6	Arbitration	60
	20.7	Failure to Comply with Dispute Board's Decision	61
	20.8	Expiry of Dispute Board's Appointment	
APPE	NDIX: C	DISPUTE BOARD	62



### VI. General Conditions (GC)

Guwahati Metropolitan Development Authority Government of Assam, Guwahati, Assam, India

### Contract Package No.: C#06

Procurement of Works (Item Rate)
Supply, Installation, Construction and Commissioning of 1 (one) Pumping Station, M.S. Pipes and HDPE Pipes & Installation and commissioning of D.I. Pipes for Distribution Network in Geeta Nagar & Lechu Bagan area of South Central Zone.

GC are as per the Bank Harmonized Edition of the Conditions of Contract for Construction prepared by the International Federation of Consulting Engineer, FIDIC 2005 in accordance to the Sample Document.



Chief Executive Officer

Guwahati Metropolitan Ten a Thority

### **General Conditions**

#### 1. General Provisions

#### 1.1 Definitions

In the Conditions of Contract ("these Conditions"), which include Particular Conditions, Parts A and B, and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

#### 1.1.1 The Contract

- 1.1.1.1 "Contract" means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Specification, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.
- 1.1.1.2 "Contract Agreement" means the contract agreement referred to in Sub-Clause 1.6 [Contract Agreement].
- 1.1.1.3 "Letter of Acceptance" means the letter of formal acceptance, signed by the Employer, of the Letter of Tender, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.1.4 "Letter of Tender" means the document entitled letter of tender or letter of bid, which was completed by the Contractor and includes the signed offer to the Employer for the Works.
- 1.1.1.5 "Specification" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.
- 1.1.1.6 "Drawings" means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.
- 1.1.1.7 "Schedules" means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.
- 1.1.1.8 "Tender" means the Letter of Tender and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.
- 1.1.1.9 "Bill of Quantities", "Daywork Schedule" and "Schedule of Payment Currencies" mean the documents so named (if any) which are comprised in the Schedules.
- 1.1.1.10 "Contract Data" means the pages completed by the Employer entitled contract data which constitute Part A of the Particular Conditions.

## 1.1.2 Parties and Persons

GWSP/LCB/C#06

- 1.1.2.1 "Party" means the Employer or the Contractor, as the context requires.
- 1.1.2.2 "Employer" means the person named as employer in the Contract Data and the legal successors in title to this person.
- 1.1.2.3 "Contractor" means the person(s) named as contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person(s).
- "Engineer" means the person appointed by the Employer to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clayse 3.4 [Replacement of

Chief Executive Officer

Greatati Metropolian Dev: Authority

the Engineer].

- 1.1.2.5 "Contractor's Representative" means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.
- 1.1.2.6 "Employer's Personnel" means the Engineer, the assistants referred to in Sub-Clause 3.2 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel.
- 1.1.2.7 "Contractor's Personnel" means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- 1.1.2.8 "Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.9 "DB" means the person or three persons appointed under Sub-Clause 20.2 [Appointment of the Dispute Board] or Sub-Clause 20.3 [Failure to Agree on the Composition of the Dispute Board]
- 1.1.2.10 "FIDIC" means the Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers.
- 1.1.2.11 "Bank" means the financing institution (if any) named in the Contract Data.
- 1.1.2.12 "Borrower" means the person (if any) named as the borrower in the Contract Data,

### 1.1.3 Dates, Tests, Periods and Completion

- 1.1.3.1 "Base Date" means the date 28 days prior to the latest date for submission of the Tender.
- 1.1.3.2 "Commencement Date" means the date notified under Sub-Clause 8.1 [Commencement of Works].
- 1.1.3.3 "Time for Completion" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Contract Data (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.
- 1.1.3.4 "Tests on Completion" means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.5 "Taking-Over Certificate" means a certificate issued under Clause 10 [Employer's Taking Over].
- 1.1.3.6 "Tests after Completion" means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.7 "Defects Notification Period" means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], which extends over twelve months except if otherwise stated in the Contract Data (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under



Sub-Clause 10.1 [Taking Over of the Works and Sections].

- 1.1.3.8 "Performance Certificate" means the certificate issued under Sub-Clause 11.9 [Performance Certificate].
- 1.1.3.9 "day" means a calendar day and "year" means 365 days.

### 1.1.4 Money and Payments

- 1.1.4.1 "Accepted Contract Amount" means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- 1.1.4.2 "Contract Price" means the price defined in Sub-Clause 14.1 [The Contract Price], and includes adjustments in accordance with the Contract.
- 1.1.4.3 "Cost" means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.4.4 "Final Payment Certificate" means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].
- 1.1.4.5 "Final Statement" means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].
- 1.1.4.6 "Foreign Currency" means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.
- 1.1.4.7 "Interim Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.
- 1.1.4.8 "Local Currency" means the currency of the Country.
- 1.1.4.9 "Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment].
- 1.1.4.10 "Provisional Sum" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].
- 1.1.4.11 "Retention Money" means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].
- 1.1.4.12 "Statement" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

#### 1.1.5 Works and Goods

- 1.1.5.1 "Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 "Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
- 1.1.5.4 "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
- 1.1.5.5 "Plant" means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Employer and relating to the construction or operation of

EB/C#06

the Works.

- 1.1.5.6 "Section" means a part of the Works specified in the Contract Data as a Section (if any).
- 1.1.5.7 "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 "Works" mean the Permanent Works and the Temporary Works, or either of them as appropriate.

#### 1.1.6 Other Definitions

- 1.1.6.1 "Contractor's Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract
- 1.1.6.2 "Country" means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.
- 1.1.6.3 "Employer's Equipment" means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Employer.
- 1.1.6.4 "Force Majeure" is defined in Clause 19 [Force Majeure].
- 1.1.6.5 "Laws" means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.
- 1.1.6.6 "Performance Security" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].
- 1.1.6.7 "Site" means the places where the Permanent Works are to be executed including storage and working areas and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 "Unforeseeable" means not reasonably foreseeable by an experienced contractor by the Base Date.
- 1.1.6.9 "Variation" means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

### 1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree," "agreed" or "agreement" require the agreement to be record in writing;
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and
- (e) the word "tender" is synonymous with "bid", and "tenderer" with "bidder" and the words "tender documents" with "bidding documents"

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

In these Conditions, provisions including the expression "Cost plus profit" require this profit to be one-twentieth (5%) of this Cost unless otherwise indicated in the Contract Data.

1.3 Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

and discharges, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Data. However:
  - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
  - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

### 1.4 Law and Language

The Contract shall be governed by the law of the country or other jurisdiction stated in the Contract Data.

The ruling language of the Contract shall be that stated in the Contract Data.

The language for communications shall be that stated in the Contract Data. If no language is stated there, the language for communications shall be the ruling language of the Contract.

### 1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement (if any),
- (b) the Letter of Acceptance,
- (c) the Tender,
- (d) the Particular Conditions Part A,
- (e) the Particular Conditions Part B
- (f) these General Conditions
- (g) the Specification,
- (h) the Drawings, and
- (i) the Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

### 1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless the Particular Conditions establish otherwise. The Contract Agreement shall be based upon the form annexed to the Particular Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

### 1.7 Assignment

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

(a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and

may, as security in favour of a bank or financial institution,

GWSP/LCB/C#06

Chief Executive Officer
Guwahati Metropolitan Dev Authority

assign its right to any moneys due, or to become due, under the Contract.

#### 1.8 Care and Supply of Documents

The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Engineer six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

#### 1.9 Delayed Drawings or Instructions

The Contractor shall give notice to the Engineer whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Engineer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit

# 1.10 Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:

- apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and

in the case of Contractor's Documents which are in the form of

GWSP/LCB/C#06

Chief Executive Officer
Gunahati Metropolitan Dev. Authority

computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

### 1.11 Contractor's Use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

#### 1.12 Confidential Details

The Contractor's and the Employer's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify the Contractor's compliance with the Contract and allow its proper implementation.

Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

#### 1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Particular Conditions:

- (a) the Employer shall have obtained (or shall obtain) the planning, zoning, building permit or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or to be) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

### 1.14 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;
- (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and
- (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

### 1.15 Inspections and Audit by the Bank

GWSP/LCB/C#06

The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank.

Chief Executive Office r Guwahati Metropolitan Dev. Authority

### 2. The Employer

### 2.1 Right of Access to the Site

The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Contract Data. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Specification. However, the Employer may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Contract Data, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

### 2.2 Permits, Licences or Approvals

The Employer shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:

- (a) copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
- (b) any permits, licences or approvals required by the Laws of the Country:
  - (i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
  - (ii) for the delivery of Goods, including clearance through customs, and
  - (iii) for the export of Contractor's Equipment when it is removed from the Site.

### 2.3 Employer's Personnel

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and
- (b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].

# 2.4 Employer's Financial Arrangements

The Employer shall submit, before the Commencement Date and thereafter within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment]. Before the Employer makes any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.

In addition, if the Bank has notified to the Borrower that the Bank

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

has suspended disbursements under its loan, which finances in whole or in part the execution of the Works, the Employer shall give notice of such suspension to the Contractor with detailed particulars, including the date of such notification, with a copy to the Engineer, within 7 days of the Borrower having received the suspension notification from the Bank. If alternative funds will be available in appropriate currencies to the Employer to continue making payments to the Contractor beyond a date 60 days after the date of Bank notification of the suspension, the Employer shall provide reasonable evidence in such notice of the extent to which such funds will be available.

#### 2.5 Employer's Claims

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Engineer shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], or for other services requested by the Contractor.

The notice shall be given as soon as practicable and no longer than 28 days after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

### 3. The Engineer

# 3.1 Engineer's Duties and Authority

The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
  - any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions,

GWSP/LCB/C#06

Chief Executive Officer.
Generalization Metropolitan Dev. Authority

discrepancies and non-compliances.

Any act by the Engineer in response to a Contractor's request except otherwise expressly specified shall be notified in writing to the Contractor within 28 days of receipt.

The following provisions shall apply:

The Engineer shall obtain the specific approval of the Employer before taking action under the-following Sub-Clauses of these Conditions:

- (a) Sub-Clause 4.12 [Unforeseeable Physical Conditions]: Agreeing or determining an extension of time and/or additional cost.
- (b) Sub-Clause 13.1 [Right to Vary]: Instructing a Variation, except;
  - (i) in an emergency situation as determined by the Engineer, or
  - (ii) if such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Contract Data.
- (c) Sub-Clause 13.3 [Variation Procedure]: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 [Right to Vary] or 13.2 [Value Engineering].
- (d) Sub-Clause 13.4 [Payment in Applicable Currencies]: Specifying the amount payable in each of the applicable currencies

Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 [Variations and Adjustments] and shall notify the Contractor accordingly, with a copy to the Employer.

# 3.2 Delegation by the Engineer

GWSP/LCB/C#06

The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties.

However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;
- if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer,

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

who shall promptly confirm, reverse or vary the determination or instruction.

## 3.3 Instructions of the Engineer

The Engineer may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:

- (a) gives an oral instruction,
- (b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
- (c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).

# 3.4 Replacement of the Engineer

If the Employer intends to replace the Engineer, the Employer shall, not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer. If the Contractor considers the intended replacement Engineer to be unsuitable, he has the right to raise objection against him by notice to the Employer, with supporting particulars, and the Employer shall give full and fair consideration to this objection.

#### 3.5 Determinations

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars within 28 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

### 4. The Contractor

### 4.1 Contractor's General Obligations

The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works

The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.

All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country as defined by the Bank.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.

The Contractor shall, whenever required by the Engineer, submit details

Chief Executive Officer

Page 12 of 67

of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.

If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Particular Conditions:

- the Contractor shall submit to the Engineer the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
- (b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Engineer to add to the Drawings for co-ordination of each Party's designs;
- (c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
- (d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Engineer the "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

## 4.2 Performance Security

The Contractor shall obtain (at his cost) a Performance Security for proper performance, in the amount and currencies stated in the Contract Data. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract.

The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Employer was not entitled to make the claim.

The Employer shall return the Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.

Without limitation to the provisions of the rest of this Sub-Clause, whenever the Engineer determines an addition or a reduction to the Contract Price as a result of a change in cost and/or legislation or as a result of a Variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that

currency by an equal percentage.

### 4.3 Contractor's Representative

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Engineer's prior consent, and the Engineer shall be notified accordingly.

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Engineer has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

### 4.4 Subcontractors

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
- (b) the prior consent of the Engineer shall be obtained to other proposed Subcontractors;
- (c) the Contractor shall give the Engineer not less than 28 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and
- (d) each subcontract shall include provisions which would entitle the Employer to require the subcontract to be assigned to the Employer under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Employer].

The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.

Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.

4.5 Assignment of

If a Subcontractor's obligations extend beyond the expiry date of the

Chief Executive Officer

Gunahati Metropolitan Dev. Authority

#### Benefit of Subcontract

relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Employer, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Employer for the work carried out by the Subcontractor after the assignment takes effect.

### 4.6 Co-operation

The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- (a) the Employer's Personnel,
- (b) any other contractors employed by the Employer, and
- (c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to suffer delays and/or to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Engineer in the time and manner stated in the Specification.

### 4.7 Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

### 4.8 Safety Procedures

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Employer's Taking Over], and

GWSP/LCB/C#05

(e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

### 4.9 Quality Assurance

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

### 4.10 Site Data

The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which come into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- (d) the Laws, procedures and labour practices of the Country, and
- (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

### 4.11 Sufficiency of the Accepted Contract Amount

The Contractor shall be deemed to:

- have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects.

### 4.12 Unforeseeable Physical Conditions

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to

Chief Executive Officer

the Engineer as soon as practicable.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Engineer may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

Upon receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favourable conditions were encountered, the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Engineer shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of any such evidence.

### 4.13 Rights of Way and Facilities

Unless otherwise specified in the Contract the Employer shall provide free of charge unrestricted access to and possession of the Site including special and/or temporary rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities outside the Site which he may require for the purposes of the Works.

### 4.14 Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

### 4.15 Access Route

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes:
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route;
- (d) the Employer does not guarantee the suitability or availability of particular access routes; and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

### **4.16** Transport of Goods Unless otherwise stated in the Particular Conditions:

- the Contractor shall give the Engineer not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

### 4.17 Contractor's Equipment

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

### 4.18 Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

### 4.19 Electricity, Water and Gas

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Specifications, for the tests.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

4.20 Employer's Equipment and Free-Issue Materials

The Employer shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification.

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

Page 18 of 67

Unless otherwise stated in the Specification:

- (a) the Employer shall be responsible for the Employer's Equipment, except that
- (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Engineer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer of liability for any shortage, defect or default not apparent from a visual inspection.

#### 4.21 Progress Reports

Unless otherwise stated in the Particular Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
  - (i) commencement of manufacture,
  - (ii) Contractor's inspections,
  - (iii) tests, and
  - (iv) shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of notices given under Sub-Clause 2.5 [Employer's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];

Executive Office

Page 19 of 67

- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

#### 4.22 Security of the Site

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and
- (b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site.

# 4.23 Contractor's Operations on Site

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Engineer as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

### 4.24 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

### 5. Nominated Subcontractors

(b)

5.1 Definition of "nominated Subcontractor" In the Contract, "nominated Subcontractor" means a Subcontractor:

- (a) who is stated in the Contract as being a nominated Subcontractor, or
  - whom the Engineer, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor subject to Sub-Clause 5.2 [Objection to

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

Page 20 of 67

Notification].

### 5.2 Objection to Nomination

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees in writing to indemnify the Contractor against and from the consequences of the matter:

- (a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;
- (b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or
- (c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:
  - undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract;
  - (ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities; and
  - (iii) be paid only if and when the Contractor has received from the Employer payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].
- 5.3 Payments to nominated Subcontractors

The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor's invoices approved by the Contractor which the Engineer certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

5.4 Evidence of Payments Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

(a) submits this reasonable evidence to the Engineer, or

(b)

- (i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
- (ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,

then the Employer may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Employer, the amount which the nominated Subcontractor was directly paid by the Employer.

### 6. Staff and Labour

6.1 Engagement of Staff and Labour Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, feeding transport, and, when

Chief Executive Officer
Guwantati Metropolitam Dev. Authority

Page 21 of 67

appropriate, housing.

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience from sources within the Country.

# 6.2 Rates of Wages and Conditions of Labour

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of the Country for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

### 6.3 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel.

### 6.4 Labour Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

#### 6.5 Working Hours

No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours stated in the Contract Data, unless:

- (a) otherwise stated in the Contract,
- (b) the Engineer gives consent, or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer.

### 6.6 Facilities for Staff and Labour

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

### 6.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of

Page 22 of 67

persons, and damage to property, as the Engineer may reasonably require.

HIV-AIDS Prevention. The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor's employees, all Sub-Contractors and Consultants' employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labour as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labour.

The Contractor shall include in the program to be submitted for the execution of the Works under Sub-Clause 8.3 [Programme] an alleviation program for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation this program shall not exceed the Provisional Sum dedicated for this purpose.

#### 68 Contractor's Superintendence

Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

#### Contractor's 6.9 Personnel

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- persists in any misconduct or lack of care,
- carries out duties incompetently or negligently, (b)
- fails to conform with any provisions of the Contract, or
- persists in any conduct which is prejudicial to safety, health, or (d) the protection of the environment.

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and **Equipment** 

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding

Chief Executive Officer

Page 23 of 67

at the completion date stated in the Taking-Over Certificate for the Works.

#### 6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

### 6.12 Foreign Personnel

The Contractor may bring in to the Country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, if requested by the Contractor, use his best endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.

The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

### 6.13 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.

#### 6.14 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

# 6.15 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

### 6.16 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal thereto by Contractor's Personnel.

## 6.17 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

### 6.18 Festivals and Religious Customs

The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.

### 6.19 Funeral Arrangements

The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.

# 6.20 Prohibition of Forced or Compulsory Labour

The contractor shall not employ "forced or compulsory labour" in any form. "Forced or compulsory labour" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

### 6.21 Prohibition of Harmful Child Labour

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

### 6.22 Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer, and these records shall be available for inspection by Auditors during normal working hours. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

### 7. Plant, Materials and Workmanship

7.1 Manner of

The Contractor shall carry out the manufacture of Plant, the

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

#### Execution

production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognised good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

### 7.2 Samples

The Contractor shall submit the following samples of Materials, and relevant information, to the Engineer for consent prior to using the Materials in or for the Works:

- (a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
- (b) additional samples instructed by the Engineer as a Variation.

Each sample shall be labelled as to origin and intended use in the Works.

### 7.3 Inspection

The Employer's Personnel shall at all reasonable times:

- (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- (b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials

The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Engineer whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

### 7.4 Testing

This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Engineer may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Engineer shall give the Contractor not less than 24 hours' notice of the Engineer's intention to attend the tests. If the Engineer does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Engineer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Engineer has not attended the tests, he shall be deemed to have accepted the readings as accurate.

#### 7.5 Rejection

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

If the Engineer requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer.

#### 7.6 Remedial Work

Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:

- (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
- (b) remove and re-execute any other work which is not in accordance with the Contract, and
- (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer all costs arising from this failure.

### 7.7 Ownership of Plant and Materials

Except otherwise specified in the Contract, each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is incorporated in the Works;
- (b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

### 7.8 Royalties

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

- (a) natural Materials obtained from outside the Site, and
- (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the

Chief Executive Officer

Guyahati Metropolitan Dev. Authority

Page 26 of 67

Contract.

### 8. Commencement, Delays and Suspension

### 8.1 Commencement of Works

Except otherwise specified in the Particular Conditions, the Commencement Date shall be the date at which the following precedent conditions have all been fulfilled and the Engineer's instruction recording the agreement of both Parties on such fulfilment and instructing to commence the Works is received by the Contractor:

- signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities in the Country;
- (b) delivery to the Contractor of reasonable evidence of the Employer's Financial arrangements (under Sub-Clause 2.4 [Employer's Financial Arrangements])
- (c) except if otherwise specified in the Contract Data, possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works; and
- (d) receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.

If the said Engineer's instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 16.2 [Termination by Contractor].

The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.

## 8.2 Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

### 8.3 Programme

The Contractor shall submit a detailed time programme to the Engineer within 28 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
- (b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
  - a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
  - (ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site

for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price, or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer in accordance with this Sub-Clause.

## 8.4 Extension of Time for Completion

The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking-Over of the Works and Sections] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,
- a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- $\begin{array}{ll} \text{(d)} & \text{Unforeseeable shortages in the availability of personnel or} \\ & \text{Goods caused by epidemic or governmental actions, or} \end{array}$
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

### 8.5 Delays Caused by Authorities

If the following conditions apply, namely:

- the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) these authorities delay or disrupt the Contractor's work, and
- (c) the delay or disruption was Unforeseeable,

then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

### 8.6 Rate of Progress

If, at any time:

- (a) actual progress is too slow to complete within the Time for Completion, and/or
- (b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],

other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Engineer may instruct the Contractor

Chief Executive Officer Guwallati Metropolitan Dev. Authority