

Construction of the Kigongo-Busisi Bridge (3,000m) and its Approach Roads

BILL 1000: GENERAL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS				
12.01	Land acquisition:				
	a) Arrange and pay compensation for acquisition of land for the works	PS			600,000,000
	b) Allow for Contractor's overheads and profits as a percentage of Subitem 12.01 (a)	%			
SS12.02	Relocation of services:				
	a) Arrange and pay for removal and/or alteration to services provided by agencies for electricity supply, water supply or telecommunication services	PS			200,000,000
	b) Allow for Contractor's overheads and profits as a percentage of Subitem 12.02 a)	%			
	c) Arrange and pay for removal of existing fences	PS			30,000,000
	d) Allow for Contractor's overheads and profits as a percentage of Subitem SS12.02 c)	%			
SS12.06	Disputes Board (DB)				
	a) Provisional sum to cover the Employer's obligation to pay the Dispute Board (DB)	PS			600,000,000
	b) Allow for contractor's overhead and profit as percentage of sub item SS12.06 a)	%			
Sub Total of Bill 1000 (Carried Forward)					

BILL 1000: GENERAL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 1000 (Brought Forward)					
1300	SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
13.01	Contractor's obligations				
	a) Sureties	LS			
	b) Insurance of works	LS			
	c) Insurance of constructional plant and equipment	LS			
	d) Third party insurance	LS			
SS13.01	e) Project name board	LS			
Sub Total of Bill 1000 (Carried Forward)					

BILL 1000: GENERAL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 1000 (Brought Forward)				
	SECTION 1400: ENGINEERS ACCOMMODATION AND ATTENDANCE UPON ENGINEER AND HIS SITE PERSONNEL				
SS14.01	Houses for the Engineer:				
	a) Provide Type I house fully furnished and equipped for the Engineer (2 No.)	LS			
	b) Provide Type II house fully furnished and equipped for the Engineer (4 No.)	LS			
	c) Provide Type III house fully furnished and equipped for the Engineer (3 No.)	LS			
	d) Provide multiple accommodation units fully furnished and equipped for the Engineer (1 No.)	LS			
	e) Provide fully furnished and equipped temporary accommodation and offices for the Engineer	month	3		
	f) Maintain and pay all rents and municipal services for Type I house fully furnished and equipped for the Engineer	No x Month	90		
	g) Maintain and pay all rents and municipal services for Type II house fully furnished and equipped for the Engineer	No x Month	180		
	h) Maintain and pay all rents and municipal services for Type III house fully furnished and equipped for the Engineer	No x Month	135		
	i) Maintain and pay all rents and municipal services for multiple accommodation units fully furnished and equipped for the Engineer	No x Month	45		
	j) Maintain and pay all rents and municipal services for fully furnished and equipped temporary accommodation and offices for the Engineer	Month	3		
SS14.02	Offices for the Engineer:				
	a) Provide fully furnished and equipped offices for the Engineer	LS			
	b) Maintain and pay all rents and municipal services for fully furnished and equipped offices for the Engineer	office x month	45		
	c) Operational (8 No) mobile telephones for engineer's office, limited to TZS 5,000 recharge time per telephone per day	PS			43,000,000
	d) Allow for Contractor's overheads and profits as a percentage of Subitem SS14.02 (c)	%			
	Sub Total of Bill 1000 (Carried Forward)				

Construction of the Kigongo-Busisi Bridge (3,000m) and its Approach Roads

BILL 1000: GENERAL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 1000 (Brought Forward)					
14.03	Wash house for the Engineer:				
	a) Provide and maintain fully furnished and equipped wash house for the Engineer	LS			
	b) Maintain and pay all rents and municipal services for fully furnished and equipped wash house for the Engineer	No x Month	48		
14.04	Site Cabin / Office for the Engineer:				
	a) Provide fully furnished and equipped site cabin / office for the Engineer	LS			
	b) Maintain and pay all rents and municipal services for fully furnished and equipped site cabin / office for the Engineer	No x Month	48		
14.05	Four wheel drive station wagon for the Engineer:				
	a) Provide 4 No. brand new vehicles for the Engineer (2 no.) and Employer (2 no.), 4WD long wheel station wagon as approved by the Engineer	LS			
	b) Operate and maintain vehicles as specified above for an average of 4500 km per month	(vehicle) x (month)	192		
	c) Operate vehicles as specified above for travel distance in excess of average 4500 km per month	km	96,000		
14.06	Four wheel drive double cab pick-up for the Engineer:				
	a) Provide 6 No. vehicles for the Engineer and Employer:	LS			
	b) Operate and maintain vehicles as specified above for an average of 4500 km per month	(vehicle) x (month)	288		
	c) Operate vehicles as specified above for travel distance in excess of average 4500 km per month	km	144,000		
14.07	Survey equipment for the Engineer:				
	a) Provide specified survey equipment for the Engineer	LS			
	b) Maintain specified survey equipment for the Engineer	month	48		
SS14.08	Laboratory for the Engineer:				
	a) Provide laboratory fully furnished for the Engineer	LS			
	b) Maintain laboratory fully furnished for the Engineer	month	48		
	c) Testing by a commercial laboratory	PS			120,000,000
	d) Allow for contractor's overhead and profit as a percentage of item 14.08 (c)	%			
14.09	Laboratory equipment for the Engineer:				
	a) Provide specified laboratory equipment for the Engineer	LS			
	b) Maintain specified laboratory equipment for the Engineer	month	48		
14.10	Meals in Contractor's mess hall for the Employer's staff	No	960		
Sub Total of Bill 1000 (Carried Forward)					

BILL 1000: GENERAL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 1000 (Brought Forward)				
	SECTION 1700: ENVIRONMENTAL PROTECTION AND WASTE DISPOSAL				
SS17.01	Environmental protection				
	a) Provision and operation of the Contractor's Environmental Management Plan and performance of all measures specified, including payment of all fees	PS			100,000,000
	b) Allow for contractor's overhead and profit as a percentage of item 17.01 (a) above	%			
	Sub Total of Bill 1000 (Carried Forward)				

BILL 1000: GENERAL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 1000 (Brought Forward)				
	SECTION 1800: HIV/AIDS, GENDER ISSUES, SOCIAL ISSUES AND LOCAL PARTICIPATION				
SS18.01	Instituting an HIV/AIDS awareness campaign	month	48		
SS18.02	a) Instituting an HIV/AIDS Prevention Campaign	PS			75,000,000
	b) Allow for contractors overhead and profits as a % of item SS18.02(a) above	%			
	Total of Bill 1000 (Carried to Grand Summary)				

BILL 2000: DRAINAGE WORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	SECTION 2100: DRAINS				
21.01	Excavation of open drains:				
	a) Excavating soft material situated within the following depth ranges below the surface level:				
	i) 0 m up to 1,5 m	m ³	2,450		
	b) Extra over subitem 21.01 a) for excavation in rock as defined in Clause 3603, irrespective of depth	m ³	196		
21.12	Concrete outlet structures, manhole boxes, junction boxes				
	Kerb Inlets and Outlet Structures				
	a) Outlet Structures (dwg T004/DS/Y-002)	No	8		
	b) Manholes (dwg T004/DS/Y-001)	No	1		
	c) Kerb Inlets (dwg T004/DS/Y-003)	No	22		
	e) Energy dissipator outlet at end of concrete chutes and lined drains (dwg T004/DS/Y-007)	No	16		
	Sub Total of Bill 2000 (Carried Forward)				

BILL 2000: DRAINAGE WORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 2000 (Brought Forward)					
SECTION 2200: PREFABRICATED CULVERTS					
22.01	Excavation				
	a) Excavating soft material situated within the following depth ranges below the surface level:				
	i) 0 m up to 1,5 m	m ³	132		
	ii) Exceeding 1,5 m and up to 3,0 m	m ³	2,990		
	iii) Exceeding 3,0m per increment of 1,5m	m ³	344		
	b) Extra over subitem 22.01 a) for excavation in rock as defined in Clause 3603, irrespective of depth	m ³	264		
22.02	Backfilling				
	a) Using excavated material	m ³	2,381		
	b) Using imported selected material	m ³	190		
22.03	Concrete pipe culverts:				
	b) On class B bedding:				
	i) 600 mm diameter, class 100 D	m	933		
Sub Total of Bill 2000 (Carried Forward)					

BILL 2000: DRAINAGE WORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 2000 (Brought Forward)				
	SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELING, OPEN CONCRETE CHUTES AND CONCRETE LININGS FOR OPEN DRAINS				
23.01	Concrete kerbing cast in-situ or manufactured on site (class 30/19 concrete): (dwg T004/DS/C-001)				
	a) 200x380 Precast barrier kerb (Median only)	m	2,918		
	b) 125x250 flush edge beam (Sidewalk edging)	m	3,505		
	d) 300x300 Cast in-situ edge beam (Intersections end)	m	31		
23.02	Concrete kerbing-channeling combination, kerbing pre-cast and channels cast in-situ (class 30/19 concrete) (dwg T004/DS/C-001)				
	a) 200x380 Barrier kerb with 330x193 channel (Excl. median)	m	3,520		
23.03	Concrete chutes (dwg T004/DS/J-004):				
	a) Precast Concrete chute Class 30/19	m	45		
23.05	Inlet, outlet, transition and similar structures				
	a) Concrete Class 30/19	No	41		
23.11	Concrete screed or backfill below chutes (class 25/19)				
		m ³	1		
23.12	Steel reinforcement (for concrete drains, energy breakers & in-/outlet structures):				
	b) High-tensile steel bars	t	3.0		
	Sub Total of Bill 2000 (Carried Forward)				

BILL 2000: DRAINAGE WORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 2000 (Brought Forward)				
	SECTION 2500: PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION				
25.01	Stone Pitching				
	b) Grouted stone pitching (For Concrete chutes)	m ²	8		
25.04	Concrete pitching and block paving (dwg T004/DS/C-001)				
	b) Segmented block paving: (Excl. bridge)				
	i) 60mm thick interlocking brick pavers for sidewalks	m ³	525		
25.05	Concrete edge beams (Class 30/19)				
	i) 300x300 concrete edge beams for intersections	m ³	3		
	Total of Bill 2000 (Carried to Grand Summary)				

BILL 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
31.01	SECTION 3100: CLEARING, GRUBBING AND REMOVAL OF TOPSOIL				
	Clearing, grubbing and removal of topsoil:				
	a) Clearing and grubbing				
	i) Within the road reserve	ha	10.2		
	b) Removal of topsoil				
	i) Topsoil in windrows alongside the work area	m ³	12,146		
	Sub Total of Bill 3000 (Carried Forward)				

BILL 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 3000 (Brought Forward)				
	SECTION 3200: REMOVAL OF EXISTING STRUCTURES				
32.01	Removal of existing structures: d) Removal of existing kerbs including channels	m	1,181		
	Sub Total of Bill 3000 (Carried Forward)				

BILL 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 3000 (Brought Forward)				
	SECTION 3600: EARTHWORKS				
SS36.01	Excavations:				
	a) Common excavation including unsuitable roadbed or embankment material to spoil or stock pile	m ³	30,480		
	b) Rock excavation	m ³	2,440		
36.02	Fill and improved subgrade layers:				
	a) Improved subgrade layer as specified in the drawings to require minimum G15 quality material	m ³	6,222		
	b) Improved subgrade layer as specified in the drawings to require minimum G7 quality material	m ³	6,500		
	c) Improved subgrade layer as specified in the drawings to require minimum G3 quality material	m ³	3,250		
	d) Fill or improved subgrade layer using rock fill	m ³	100		
	Sub Total of Bill 3000 (Carried Forward)				

BILL 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 3000 (Brought Forward)					
SECTION 3800: STABILIZATION					
38.02	Chemical stabilisation, payment for cost of providing: b) 200mm Cemented bound (C1) Subbase course	m ³	7,906		
38.03	Chemical stabiliser agent: b) Ordinary Portland Cement	t	712		
Sub Total of Bill 3000 (Carried Forward)					

BILL 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 3000 (Brought Forward)					
SECTION 3900: CRUSHED AGGREGATE BASE COURSE					
39.01	Crushed aggregate for base course: b) 150mm Crushed aggregate (CRR)	m ³	5,286		
Total of Bill 3000 (Carried to Grand Summary)					

BILL 4000: BITUMINOUS LAYERS AND SEALS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 4000 (Brought Forward)				
	SECTION 4200: BITUMINOUS BASE COURSE AND ASPHALT CONCRETE SURFACING				
42.02	Asphalt Concrete Surfacing:				
	a) 50mm SP 12.5 Superpave Asphalt Concrete surfacing	m ³	1,762		
	b) Bitumen for asphalt concrete surfacing of type Superpave Performance Grade bitumen PG 70-10	t	159		
	Sub-Total of Bill 4000 (Carried Forward)				

BILL 4000: BITUMINOUS LAYERS AND SEALS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 4000 (Brought Forward)				
	SECTION 4800: SURFACING OF BRIDGE DECKS				
48.01	Surfacing on bridge deck (PG70-10 penetration grade bitumen, aggregate max size 12.5mm) (SP12.5, 80mm compacted thickness)	m ³	5,131		
SS48.02	Waterproof membrane on bridge deck	m ²	101,426		
	Total of Bill 4000 (Carried to Grand Summary)				

BILL 5000: ANCILLARY ROADWORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
51.01	<p>SECTION 5100: MARKER AND KILOMETRE POSTS</p> <p>Marker posts (Road reserve)</p>	No	58		
Sub Total of Bill 5000 (Carried Forward)					

BILL 5000: ANCILLARY ROADWORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 5000 (Brought Forward)					
SECTION 5200: GUARDRAILS					
52.01	Guardrails on steel posts:				
	a) Galvanised	m	3,390		
52.04	End units:				
	b) End sections including foundation in the ground where double guardrail sections are used	No	8		
52.05	Additional guardrail posts:				
	b) Steel	No	911		
52.06	Reflective plates	No	455		
Sub Total of Bill 5000 (Carried Forward)					

BILL 5000: ANCILLARY ROADWORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 5000 (Brought Forward)				
	SECTION 5400: ROAD SIGNS				
54.01	Road signs:				
	a) Regulatory (R1) Stop sign (w=1200mm)	No	4		
	b) Circular regulatory signs (d=1200mm)				
	i) R201-60	No	4		
	ii) R201-80	No	4		
	iii) R201-100	No	4		
	iv) R103	No	6		
	c) Triangular regulatory and warning signs:				
	i) W102 (1005x1200mm)	No	4		
	ii) W401 (1000x250mm)	No	9		
	iii) W402 (1000x250mm)	No	6		
	iv) W306 (1005x1200mm)	No	8		
	d) Guidance signs:				
	i) GS101 (1600 x 1200mm)	No	2		
	ii) GS102 (1600 x 1200mm)	No	6		
	iii) GL4	No	2		
	e) Warning signs: (1000 x 250mm)	No	8		
54.02	Additional road sign plates: Supplementary plates				
	a) IN11.3 (400x1200mm)	No	8		
54.03	Route direction signs				
	a) Direction signs (GD2)	No	4		
	Sub Total of Bill 5000 (Carried Forward)				

BILL 5000: ANCILLARY ROADWORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 5000 (Brought Forward)				
	SECTION 5500: ROAD MARKINGS				
55.03	Thermo-plastic Road-marking material: Hydrocarbon based with rumbling effect				
	a) White lines				
	i) broken or unbroken width of line: 100mm	m	18,465		
	ii) broken or unbroken width of line: 200mm	m	1,382		
	iii) broken or unbroken, width of line: 500mm	m	20		
	b) Yellow lines				
	i) broken or unbroken, width of line: 100mm	m	9,531		
	d) White lettering and symbols	m ²	206		
	e) Yellow Lettering and Symbols	m ²	17		
	f) Traffic island markings (any colour)	m ²	2,534		
55.04	Variations in rate of application:				
	a) White paint	litre	1,000		
	b) Yellow paint	litre	1,000		
55.06	Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)	m	29,398		
55.07	Re-establishing the painting unit at the end of the maintenance period	LS			
	Sub Total of Bill 5000 (Carried Forward)				

BILL 5000: ANCILLARY ROADWORKS

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 5000 (Brought Forward)				
	SECTION 5700: LANDSCAPING AND GRASSING				
57.01	Trimming				
	a) Machine trimming	m ²	28,109		
	b) Hand trimming	m ²	28,109		
57.03	Preparing the areas for grassing:				
	b) Ploughing	ha	10.2		
	c) Topsoiling within the road reserve, where the following materials are used:				
	i) Topsoil obtained from within the road reserve or borrow areas (free haul 1,0 km)	m ³	15,300		
57.04	Grassing:				
	c) Hydroseeding:				
	i) Providing an approved seed mixture for hydroseeding	kg	1,020		
	ii) Providing an approved mulch	kg	7,650		
	iii) Hydroseeding	ha	10.2		
	Sub Total of Bill 5000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	SECTION 6100: FOUNDATIONS FOR STRUCTURES				
SS61.01	Additional foundation investigations				
	a) Arrange and pay for additional foundation investigations	PS			300,000,000
	b) Allow for contractor's overhead and profit as percentage of sub item SS61.01(a)	%			
61.02	Excavation				
	a) Common excavation in soft material situated within the following successive depth ranges:				
	i) 0 m up to 2 m	m ³	4,112		
	ii) 2 m up to 4 m	m ³	2,255		
	iii) 4 m up to 6 m	m ³	208		
	b) Extra over 61.02(a) for excavation in rock irrespective of depth	m ³	1,891		
61.03	Access and drainage				
	a) Access	LS			
61.04	Backfill to excavations utilising				
	a) Material from the excavations	m ³	5,350		
	b) Imported material				
	i) G45 for abutments	m ³	1,476		
61/36.02	Fill and improved subgrade layers				
	a) Improved subgrade layer as specified in the drawings to require minimum G7 quality material	m ³	805		
61.14	Establishment on the site for piling	LS			
61.15	Moving to, and setting up the equipment at each position for the installing of piles	no	65		
61.16	Augered or bored holes for piles with a diameter through material situated within the following successive depth ranges:				
	b) Bored holes (Diameter: 2.5m)				
	i) 0 m up to 10 m	m	840		
	ii) Exceeding 10 m, up to 15m	m	420		
	iii) Exceeding 15 m, up to 20 m	m	420		
	iv) Exceeding 20 m, up to 25 m	m	420		
	v) Exceeding 25 m, up to 30 m	m	420		
	vi) Exceeding 30 m, up to 35 m	m	420		
	vii) Exceeding 35 m, up to 40 m	m	420		
	viii) Exceeding 40 m, up to 45m	m	273		
	ix) Exceeding 45 m, up to 50 m	m	160		
	x) Exceeding 50 m, up to 55 m	m	138		
	xi) Exceeding 55 m, up to 60 m	m	60		
	xii) Exceeding 60 m, up to 65 m	m	18		
	Sub Total of Bill 6000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 6000 (Brought Forward)				
	c) Bored holes (Diameter :1.5m)				
	i) 0 m up to 10 m	m	7,200		
	ii) Exceeding 10 m, up to 15m	m	3,457		
	iii) Exceeding 15 m, up to 20 m	m	3,287		
	iv) Exceeding 20 m, up to 25 m	m	3,047		
	v) Exceeding 25 m, up to 30 m	m	2,690		
	vi) Exceeding 30 m, up to 35 m	m	2,041		
	vii) Exceeding 35 m, up to 40 m	m	1,551		
	viii) Exceeding 40 m, up to 45m	m	936		
	ix) Exceeding 45 m, up to 50 m	m	365		
	x) Exceeding 50 m, up to 55 m	m	16		
61.21	a) Forming augered and bored pile holes through unidentified obstructions	PS			6,900,000,000
	b) Allow for contractor's overhead and profit as percentage of sub item 61.21(a)	%			
61.27	Installing permanent pile casings for piles				
	a) Diameter 2.5m	m	4,896		
	b) Diameter 1.5m	m	30,562		
61.29	Steel reinforcement in cast in situ piles:				
	b) High-yield-stress-steel bars Grade 460	t	10,101		
61.30	Cast in situ concrete in piles of Class 45/15	m3	72,148		
61.31	Extra over Item 61.30 for concrete cast under water	m3	72,148		
61.33	Stripping/cutting the pile heads				
	a) Diameter 2.5m (H40 Reinforcement)	no	84		
	b) Diameter 1.5m (H32 Reinforcement)	no	720		
61.34	Establishment on the site for the load testing of piles	LS			
SS61.35	Load test (Cast in situ concrete piles)				
	a) Sonic Integrity Test				
	i) Diameter 2.5m	no.	84		
	ii) Diameter 1.5m	no.	720		
	b) Vertical Integrity Test				
	i) Diameter 2.5m	no.	84		
	ii) Diameter 1.5m	no.	720		
	c) Pile Loading Test (O-Cell Test)				
	i) Pier 31-35 (D2500, Test Load 37,000kN)	no	1		
	ii) Pier 2-30, 36-65, Abutment 2 (D1500, Test Load 16,300kN)	no	1		
	d) Dynamic Loading Test - Drop weight 200kN, Drop height : 2 to 3m	no	65		
	e) Lateral Loading Test (A2)	no	1		
	f) Test Pile before construction (D2500, D1500) (Test Load for Loading test 100,000kN-D2500; 40,000kN-D1500)	LS			
	Sub Total of Bill 6000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 6000 (Brought Forward)				
	SECTION 6200: FALSEWORK, FORMWORK AND CONCRETE FINISHING				
62.01	Formwork to provide:				
	a) Class F1 surface finish to:				
	i) Bridge Girder	m2	9,611		
	ii) Bridge deck	m2	59,625		
	iii) Pier columns	m2	24,175		
	b) Class F3 surface finish to:				
	i) Pier head	m2	17,192		
	ii) Pier footings (Pier 1 to 65)	m2	14,045		
	iii) Abutments	m2	1,260		
	iv) Abutment footings	m2	380		
62.07	Establishment on the site for sliding formwork operations	LS			
62.08	Transportation to and setting up the sliding formwork assembly at (Pylon)	no	3		
62.09	Forming the concrete by sliding formwork for:				
	a) Class U1 surface finish to:				
	i) Pier 32, 33 and 34	m	90		
	Sub Total of Bill 6000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 6000 (Brought Forward)				
	SECTION 6300: STEEL REINFORCEMENT FOR STRUCTURES				
63.01	Steel reinforcement for:				
	a) Abutments				
	ii) High-yield-stres-steel bars Grade 460 (460 Mpa)	t	152		
	b) Piers (Pier 1~31, Pier 35~65)				
	ii) High-yield-stres-steel bars Grade 460 (460 Mpa)	t	9,845		
	c) Pylons (Pier 32, 33 and 34)				
	ii) High-yield-stres-steel bars Grade 460 (460 Mpa)	t	3,439		
	d) Main bridge girder				
	ii) High-yield-stres-steel bars Grade 460 (460 Mpa)	t	4,326		
	e) Approach bridge deck				
	ii) High-yield-stres-steel bars Grade 460 (460 Mpa)	t	2,906		
	Sub Total of Bill 6000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 6000 (Brought Forward)				
	SECTION 6400: CONCRETE FOR STRUCTURES				
64.01	Cast in-situ concrete				
	a) Class 15/40 concrete for use in:				
	i) Lean concrete (surface on the excavation bottom)	m3	148		
	b) Class 40/15 concrete for use in:				
	i) Abutments and wing walls	m3	2,053		
	ii) Piers (Pier 1-31, Pier 35-65)	m3	66,579		
	iii) Approach bridge deck	m3	20,890		
	c) Class 50/15 concrete for use in:				
	i) Pylons (Pier 32, 33 and 34)	m3	22,016		
	d) Class 60/15 concrete for use in:				
	i) Main bridge girder	m3	24,131		
SS64.02	Manufacturing precast concrete members,				
	a) PSC beam for approach bridge, L=39.90 m	no	806		
	b) PC House for placing concrete of pile cap				
	i) Pier 3-30, Pier 36-64	no	57		
	ii) Pier 31,35	no	2		
	iii) Pylons (Pier 32, 33 and 34)	no	3		
SS64.03	Transporting and erecting precast concrete members,				
	a) PSC beam for approach bridge approximate mass = 93 tons	no	806		
	b) Precast house for placing concrete of pile cap				
	i) Pier 3-30, Pier 36-64, approximate mass = 320 tons	no	57		
	ii) Pier 31,35, approximate mass = 700 tons	no	2		
	iii) Pylons (Pier 32, 33 and 34) approximate mass = 1,150 tons	no	3		
SS64.07	Temporary Casting Yard				
	a) Clearing and grubbing and removal of topsoil, trees and existing structure	m2	12,000		
	b) Embankment (G7)	m3	3,600		
	c) G25 for top surface trafficability	m3	1,200		
	Sub Total of Bill 6000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
Sub Total of Bill 6000 (Brought Forward)					
SECTION 6500: PRESTRESSING					
SS65.01	Prestressing tendons:				
	a) Longitudinal tendons, 22 x 15.2 mm	MN-m	191,512		
	b) Transverse tendons	MN-m	61,838		
	c) Vertical tendons (Stress bar)	MN-m	2,381		
	d) Stay cables, 43 x 15.2 mm	MN-m	77,226		
SS65.02	Anchorage and couplers:				
	a) End anchorage at jacking				
	i) Longitudinal tendons, 22 x 15.2 mm	set	717		
	ii) Transverse tendons, 22 x 15.2 mm, both sides jacking	set	888		
	ii) Transverse tendons, 5 x 15.2 mm	set	474		
	b) Anchorages at dead end				
	i) Longitudinal tendons, 22 x 15.2 mm	set	79		
	ii) Transverse tendons, 5 x 15.2 mm	set	474		
	c) Duct Coupler				
	i) ϕ 113/116	no	5,425		
	ii) ϕ 87/91	no	1,999		
	iii) \square 19x90	no	2,421		
	d) Stay cable anchorage	set	144		
Sub Total of Bill 6000 (Carried Forward)					

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 6000 (Brought Forward)				
	SECTION 6600: NO-FINES CONCRETE, JOINTS. BEARINGS, PARAPETS AND DRAINAGE FOR STRUCTURES				
66.01	Cast in situ non-shrinkage materials				
	a) Non shrinkage mortar for installing bearings	m3	100		
	b) Non shrinkage concrete for expansion joint	m3	111		
SS66.05	Expansion joints:				
	a) Finger type joints with characteristics:				
	i) Expansion length (100mm) - Abutment & Approach bridges	m	227.6		
	ii) Expansion length (150mm) - Approach bridges	m	227.6		
	iii) Expansion length (250mm) - Approach bridges	m	170.7		
	iv) Expansion length (400mm) - Main bridge	m	56.9		
SS66.11	Bearings				
	a) Pot bearings for Extradosed bridge with characteristics:				
	i) V=50,000kN, H=10,000kN, fixed	no	1		
	ii) V=13,000kN, H=6,500kN, one-direction	no	2		
	iii) V=50,000kN, H=5,000kN, one-direction	no	4		
	iv) V=50,000kN, H=10,000kN, one-direction	no	1		
	v) V=50,000kN, H=15,000kN, one-direction	no	2		
	vi) V=50,000kN, H=25,000kN, one-direction	no	2		
	vii) V=13,000kN, Multi-direction, M=±200mm	no	8		
	viii) V=50,000kN, Multi-direction, M=±50mm	no	4		
	ix) V=50,000kN, Multi-direction, M=±150mm	no	16		
	b) Elastomeric bearings for approach bridge with characteristics:				
	(i) V=2,800kN, Height = 182, Fixed	no	22		
	(ii) V=2,800kN, Height = 182, One-Directional	no	366		
	(iii) V=2,800kN, Height = 182, Multi-Directional	no	1,224		
66.14	Dowels/guide bars				
	a) D25, L=600mm, CTC400 between abutment and approach slab	no	132		
SS66.16	Steel railing				
	a) Bridge Steel Railings				
	i) Vehicle Safety railing	m	6,030		
	ii) Sidewalk handrail	m	6,030		
66.17	End blocks				
	a) For bridge name panel (copper plate)	no	2		
	b) For bridge description panel (copper plate)	no	2		
66.18	Numbers for structures				
	a) Number plates				
	i) Pier number plates on the pier	no	136		
	ii) Pier number plates on the steel barrier	no	136		
66.19	Drainage pipes and weep holes				
	a) Drainage pipes:				
	i) 150mm Diameter stainless steel pipes	m	1,651		
	b) Stormwater treatment facility for Bridge as per Drawing No. T004/DS/K7 000	no	600		
	Sub Total of Bill 6000 (Carried Forward)				

BILL 6000: STRUCTURES

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
	Sub Total of Bill 6000 (Brought Forward)				
	SECTION 6700: STRUCTURAL STEELWORK				
SS67.01	Structural steel				
	a) i) Saddle for stay cable	t	60		
	Note: Bidder is to price for either Option A or Option B below, but not both.				
	ii) Temporary bridge specified in the Bidding Documents (Option A)	t	49,190		
	iii) Alternative to Option A above, to suit Bidder's own working method (Option B)	LS			
	b) i) Key seg closure	no	4		
	ii) Steel frame for saddle installation	no	6		
	iii) Form traveler (1set = 2ea)	set	3		
	iv) Temporary Support for Pier table	no	3		
	v) Temporary Support for Side Span	no	2		
	vi) Launching Girder for installation of PSC Beam	no	2		
SS67.04	Inspection and maintenance of equipment	LS			
SS67.05	Street lights	LS			
	Total of Bill 6000 (Carried to Grand Summary)				

BILL 7000: TOLERANCES, TESTING AND QUALITY CONTROL

Item No	Description	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
71.01	Special tests requested by the Engineer				
(a)	Tests	PS			250,000,000
(b)	Contractors overheads and profits	%			
Total of Bill 7000 (Carried to Grand Summary)					

Construction of the Kigongo-Busisi Bridge (3,000m) and its Approach Roads

BILL 8000: DAYWORKS

Item No	DAYWORK RATES	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
8100	Labour				
81.01	Unskilled labour	hrs	500		
81.02	Skilled labour	hrs	350		
81.03	Driver heavy	hrs	200		
81.04	Driver light	hrs	200		
81.05	Operator Class I	hrs	200		
81.06	Operator Class II	hrs	150		
81.07	Foreman	hrs	200		
81.08	Mason	hrs	175		
81.09	Carpenter	hrs	50		
81.10	Surveyor	hrs	300		
Subtotal Bill 8000 (Carried to Dayworks Summary)					250,000,000

BILL 8000: DAYWORKS

Item No	DAYWORK RATES	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
8200	Material				
82.01	Portland cement	t	5		
82.02	Reinforcement steel on site	t	5		
82.03	Fuel	l	100		
82.04	Petrol	l	50		
82.05	Lubricants	l	50		
82.06	Bitumen MC30	t	5		
82.07	Bitumen MC80/100	t	5		
82.08	Aggregates	m ³	250		
Subtotal Bill 8000 (Carried to Dayworks Summary)					

Construction of the Kigongo-Busisi Bridge (3,000m) and its Approach Roads

BILL 8000: DAYWORKS

Item No	DAYWORK RATES	UNIT	QTY	RATE (TSH)	AMOUNT (TSH)
8300	Equipment				
83.01	Dozer (Cat D&R)	hrs	75		
83.02	Truck Loader (Cat 953C)	hrs	50		
83.03	Truck Loader (Cat 973)	hrs	50		
83.04	Grader (Cat 14G)	hrs	75		
83.05	Loader (Cat 980G)	hrs	75		
83.06	Back Hoe Excavator	hrs	75		
83.07	Excavator (Cat 225)	hrs	75		
83.08	Steel roller 10/12t	hrs	50		
83.09	Pneumatic roller 12 tonne	hrs	50		
83.10	Vibrating roller 12t	hrs	50		
83.11	Dump Truck	hrs	100		
83.12	Water Tanker 6000 ltrs	hrs	100		
83.13	Air compressor	hrs	50		
83.14	Generator 15KW	hrs	100		
83.15	Generator 150KW	hrs	100		
83.16	Concrete vibrator (poker type)	hrs	100		
83.17	Vibroplate	hrs	40		
83.18	Concrete Mixer 15 HP 0.5 m3	hrs	100		
Subtotal Bill 8000 (Carried to Dayworks Summary)					

Construction of the Kigongo-Busisi Bridge (3,000m) and its Approach Roads

BILL 8000: DAYWORKS

Item	DAYWORKS SUMMARY	AMOUNT (TSH)
8100	Labour	250,000,000
8200	Material	
8300	Equipment	
Total Bill 8000 carried forward to Grand Summary		250,000,000

SUMMARY OF SPECIFIED PROVISIONAL SUMS

Item No	Description	AMOUNT (TSH)
	BILL 1000: GENERAL	
	Section 1200: General Requirements And Provisions	
12.01	Land acquisition	
	a) Arrange and pay compensation for acquisition of land for the works	600,000,000
SS12.02	Relocation Of services	
	a) Arrange and pay for removal and/or alteration to services provided by agencies for electricity supply, water supply or telecommunication services	200,000,000
	c) Arrange and pay for removal of existing fences (provisional sums)	30,000,000
SS12.06	Dispute Board (DB)	
	a) Provisional sum to cover the Employer's obligation to pay the Dispute Board (DB)	600,000,000
	Section 1400: Engineer's Accommodation And Attendance Upon Engineer's Site Personnel	
SS14.02	Office for Engineer:	
	c) Operation (8No) mobile telephones for engineer's office, limited to TZS 5,000 recharge time per telephone day per staff member mobilized on site that day.	43,000,000
SS14.08	Laboratory For The Engineer.	
	c) Testing by commercial laboratory	120,000,000
	Section 1700: Environmental Protection And Waste Disposal	
SS17.01	a) Provision and operation of the Contractor's Environmental Management Plan and performance of all measures specified, including payment of all fees	100,000,000
	Section 1800: HIV/AIDS, Gender Issues, Social Issues And Local Participation	
SS18.02	Instituting an HIV/AIDS Prevention Campaign	75,000,000
	SECTION 6100: FOUNDATIONS FOR STRUCTURES	
SS61.01	Additional foundation investigations	
	a) Arrange and pay for additional foundation investigations	300,000,000
61.21	a) Forming augered and bored pile holes through unidentified obstructions	6,900,000,000
71.01	Special tests requested by the Engineer	
	Tests	250,000,000
	Carried to Grand Summary	9,218,000,000

Construction of the Kigongo-Busisi Bridge (3,000m) and its Approach Roads

GRAND SUMMARY

ITEM	DESCRIPTION	AMOUNT (TSH)
1000	GENERAL	
2000	DRAINAGE	
3000	EARTHWORKS AND PAVEMENT	
4000	BITUMINOUS LAYERS AND SEALS	
5000	ANCILLARY ROADWORKS	
6000	STRUCTURES	
7000	TOLERANCES, TESTING AND QUALITY CONTROL	
8000	DAYWORKS	
(A)	TOTAL OF SERIES	
(B)	Less: Specified Provisional Sums included in Total of Bills	-9,218,000,000
(C)	SUB TOTAL {(A) - (B)}	
(D)	ADD: Provisional Sum for Physical Contingency {7.5% of (C)}	
(E)	ADD: Provisional Sum for Variation of Price (VoP) {7.5% of (C)}	
(F)	SUB TOTAL (A) + (D) + (E)	
(G)	ADD: Value Added Tax (VAT) {18% of (F)}	
H	TENDER PRICE {(F) + (G)} CARRIED FORWARD TO FORM OF TENDER	