

TENDER NUMBER: COM 20/2023:CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.
SECTION 1200 GENERAL REQUIREMENTS AND PROVISIONS

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
12.00	GENERAL REQUIREMENTS AND PROVISIONS				
12.01	The Contractor's obligations in respect of Local and other Labourers:				
	(a) Provision for Medical Examination for Local Labourers	PC Sum	1.00		
	(b) Contractor's charge to allow for handling costs and profit in respect of subitem 12.01(c) & (d)	%			
12.02	Liaison Officer				
	(a) Remuneration of Liaison Officer	month	8.00	9,282.00	74,256.00
	(b) Contractor's charge to allow for handling costs and profit in respect of subitem 12.02(a)	%	74,256.00		
B12.04	Training				
	a) Training and Transport				
	I) Training allowance to be paid to targeted labour when undergoing formal training.	Person days	20.00	150.00	3,000.00
	II) Extra over (a) i for the administration of payment of training allowances to targeted labour	Person days	20.00	150.00	3,000.00
	III) Provisional sum for transport and accommodation of the training in close proximity to the site.	Prov Sum	1.00	50,000.00	50,000.00
	IV) Accredited and approved training courses for selected local and other labourers	Prov Sum	1.00	200,000.00	200,000.00
	V) Handling cost and profit in respect of sub-item B13.02 a (III) and (IV) above (state % and extend a an amount)	%			
B12.06	Excavation for the exposing of, or searching of services				
	(i) Soft material	m ³	500.00		
	(ii) Hard material	m ³	10.00		
	(c) Extra Over subitems (a) and (b) above for hand excavation by means of hand tools such as picks, crowbars and pneumatic tools in close vicinity of services or where no blasting or machine excavation is allowed	%			
	(i) Soft material	m ³	50.00		
	(ii) Hard material	m ³	2.00		
B12.08	Relocation of services				
	(a) Provisional sum for protection relocation of existing water mains	Prov. Sum	1.00		
	(b) Contractor's handling costs and other charges on subitems B12.08(a), (b), (c) and (d)	%			
TOTAL CARRIED FORWARD					

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TENDER NUMBER: COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 1300 CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
13.00	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
B13.01	The Contractor's general obligations:				
	(a) Fixed obligations	Lump Sum	1.0		
	(b) Value-related obligations	Lump Sum	1.0		
	(c) Time-related obligations	Lump Sum	1.0		
	(d) Social Facilitator	Lump Sum	1.0		
	(e) Consultant's Construction monitoring Charges	Lump Sum	1.0		
B13.03	Contract nameboard:				
	(a) Supply and erect contract nameboard as per Drawing	No.	2.0		
B13.04	Occupational Health & Safety:				
	(a) Preparation of a Health and Safety Plan	Lump Sum	1.0		
	(b) Compilation of a Risk Assessment prior to construction	Lump Sum	1.0		
	(c) Health and Safety Induction Training of employees	Lump Sum	1.0		
	(d) Compilation and the keeping up to date of a Health and Safety file, which shall include all documentation required in terms of the Act	Lump Sum	1.0		
	(e) Implementation of the Health and Safety Plan over the entire construction period	Month	8.0		
TOTAL CARRIED FORWARD		AMOUNT CARRIED FORWARD			

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ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		AMOUNT	BROUGHT FORWARD		
13/B12.01	Protection, removal, realignment and Replacement of Services				
	(a) Utility services				
	(i) Relocation of services and payments to service owners	Prov Sum	1.0		
	(ii) Handling costs and profit in respect of Sub-item B (i) above	%			
TOTAL CARRIED TO SUMMARY					
					P3

TENDER NUMBER: COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.
SECTION 1400 HOUSING, OFFICES, LABORATORIES AND GENERAL OBLIGATIONS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
B14	HOUSING, OFFICES AND LABORATORIES AND GENERAL OBLIGATIONS				
B14.01	Office and laboratory accommodation:				
	(a) Offices (interior floor space only) of utility services	m ²	28		
	(e) Ablution units	m ²	10		
B14.02	Office and laboratory furniture:				
	(a) Chairs	No	15		
	(b) Desks, complete with drawers and locks	No	2		
	(c) Conference tables (10 people)	No	1		
B14.03	Office and laboratory fittings, installations and equipment:				
	(a) Items measured by number:				
	(i) 220/250 volt power points	No	2		
	(ii) Double 80 watt fluorescent-light fittings complete with ballast and tubes	No	2		
	(iii) Fire extinguishers, 9,0 kg all purpose dry powder type, complete mounted on wall with brackets	No	2		
	(iv) Air-conditioning units with 2.2kw minimum capacity mounted on wall with brackets	No	2		
	(v) General-purpose steel cupboards with shelves	No	2		
	(vi) Steel filing cabinets with drawers	No	2		
	(viii) Floodlights complete with poles and 500 watt minimum globes	No	2		
	(ix) Rain gauge	No	1		
	(x) Car-ports	No	4		
B14.04	Provisional sums items				
	(i) Provision for use by the Engineer of an independent Geotechnical laboratory.	Prov Sum	1	51,750	51,750.00
	(ii) Handling costs and profit in respect of subitem B14.03(d)(i) above	%			
TOTAL CARRIED FORWARD		AMOUNT CARRIED FORWARD			

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ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		AMOUNT	BROUGHT FORWARD		
	(iii) Provision for training of Engineering Technician	Prov Sum	1	144,000	144,000.00
	(iv) Handling costs and profit in respect of subitem B14.03(d)(iii) above	%			
	(v) Provision for use by the Engineer of Surveyor	Prov Sum	1	43,750	43,750.00
	(vi) Handling costs and profit in respect of subitem B14.03(d)(v) above	%			
	(vii) Provision for use by Engineer of Environmental Specialist, ECO, EMP	Prov Sum	1	412,800	412,800.00
	(viii) Handling costs and profit in respect of subitem B14.03(d)(viii) above	%			
	(ix) Provision of a direct independent telephone line for the Engineer, including the cost of calls in connection with contract administration and telephone rental	Prov Sum	1		
	(x) Handling costs and profit in respect of subitem B14.03(d)(ix) above	%			
	(xi) Provision of safety consultant	Prov Sum	1	364,800	364,800.00
	(xii) Handling costs and profit in respect of subitem B14.03(d)(xi) above	%			
	(xiii) Provision for Independent Engineer for Design Reviews	Prov Sum	1	65,000	65,000.00
	(xiv) Provision for COVID Compliance Officer	Prov Sum	1	556,800	556,800.00
	(xv) Compliance with Disaster Management Act, Act 57 of 2002 and its Regulations (COVID 19)	Prov Sum	1	78,000	78,000.00
	(xvi) Handling costs and profit in respect of subitem (xiii), (xiv) and (xv) above	%	0	699,800	69,980.00
TOTAL CARRIED FORWARD					
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TENDER NUMBER: COM 20/2023:CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 1700 CLEARING AND GRUBBING

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
17.00	CLEARING AND GRUBBING				
17.01	Clearing and grubbing				
	(a) By hand	ha	0.1		
	(b) By machine	ha	0.6		
17.02	Removal and grubbing of large trees and tree stumps				
	(a)Girth exceeding 1m up to and including 2m	No	10		
	(b)Girth exceeding 2m up to and including 3m	No	6		
TOTAL CARRIED TO SUMMARY					

TENDER NUMBER:COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 2100 DRAINS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
21.00	DRAINS				
21.01	Excavation for open drains:				
	(a) Excavate soft material situated within the following depth ranges below the surface level				
	(1) 0m up to 1,5m	m³	55		
	(2) Exceeding 1,5m and up to 3,0m	m³			
	(b) Extra over subitem B21.01(a) for excavation in hard material, irrespective of depth	m³	17		
21.02	Clearing and shaping existing open drains	m³	70		
21.12	Concrete Outlet structures, manhole boxes, junction boxes and cleaning for subsoil drainage systems:				
	(a) Inlet Structures	No	4		
	(b) Outlet Structures	No	4		
21.19	Selected backfill material under concrete-lined side drains compacted to 93% of modified AASHTO density	m³	85		

TOTAL CARRIED TO SUMMARY

TENDER NUMBER:COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.					
SECTION 2300 CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
23.00	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
23.07	Trimming of excavations for concrete-lined open drains				
	(a) In soft material	m ³	175		
	(b) In hard material	m ³	30		
23.08	Concrete Lining for Open Drains				
	(a) Cast In situ concrete lining Class 20/19, including				
	(i) V drain	m ³	35		
	(b) Class U2 surface finish to cast in situ concrete open drains	m ²	5,200		
23.09	Formwork to cast in situ concrete lining for open drains (class F2 surface finish):				
	(b) To side with formwork on both internal and external	m ²	600		
23.10	Sealed joints in concrete linings of open drains				
	(c) Silicone-based sealant	Prov.sum	1		
23.12	Steel Reinforcement				
	(c) Welded Steel Fabric(Mesh ref 395)	kg	1,800.0		
B 23.18	Concrete edge beam				
	(a) Cast in situ concrete edge beam 150 mm wide x 200 mm deep (Class 25/19 concrete)	m ³	4		
BALANCE BROUGHT FORWARD					

TENDER NUMBER: COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.					
SECTION 3300 MASS EARTHWORKS					
ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
33.00	MASS EARTHWORKS				
	Cut and borrow to fill, including free- haul up to 0.5km				
	(a) Gravel material in compacted layer thickness of 200 mm and less				
	(i) Compaction to 90% of modified AASHTO density	m ³	120.0		
33.03	Extra over item 33.01 for excavating and breaking down material				
	(a) Intermediate excavation	m ³	20.0		
	(b) Hard excavation	m ³	54.0		
33.04	Cut to spoil, including free-haul up to 0.5 km. Material obtained form:				
	(a) Soft excavation	m ³	20.0		
	(b) Intermediate excavation	m ³	10.0		
	(c) Hard excavation	m ³	10.0		
33.06	Variations in the number of roller passes (applicable to sub items 33.01 (a)(3) and 33.01(b)(3) and item 33.11):				
	(a) Vibratory rollers	m ² -pass	27,000.0		
	(c) Heavy grid rollers	m ² -pass	200.0		
33.10	Roadbed preparation and the compaction of material				
	(a) Compaction to 93% of modified AASHTO density	m ³	60.0		
33.12	In situ treatment of roadbed:				
	(a) In situ treatment by ripping (150mm deep)	m ³	54.0		
TOTAL CARRIED TO FORWARD					

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TENDER NUMBER: COM 20/2023:CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 3400 PAVEMENT LAYERS OF GRAVEL MATERIAL

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
34.01	<p>PAVEMENT LAYERS OF GRAVEL MATERIAL</p> <p>Pavement layers constructed from gravel taken from cut or borrow, including free-haul up to 1.0km:</p> <p>(a) rip and recompact insitu material to 95% Mod AASSHTO:</p>	m ³	30		

TOTAL CARRIED FORWARD

TENDER NUMBER: COM 20/2023:CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.					
SECTION 5200 : GABIONS					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
52.02	Gabions:				
52.03	(a) PVC-coated gabion mattresses (Type 80 with 80mm x 100mm mesh size and 2.7mm diam.	m ³	65		
TOTAL CARRIED FORWARD					

TENDER NUMBER:COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 6100: STRUCTURES

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6100	FOUNDATIONS FOR STRUCTURES				
B61.01	Additional foundation investigations				
B61.01	(a) Site investigations	prov	sum	R 44,000.00	R 44,000.00
B61.01	(b) Additional specialist services by the engineer	prov	sum	R 44,000.00	R 44,000.00
B61.02	Excavations				
	(a)Excavating soft material situated within the following successive depth ranges:				
B61.02(a)	(i) 0m up to 2m	m ³	129		
	(ii) 2m up to 4m	m ³	61		
B61.02	(b) Extra over subitem 61.02(a) for excavation in hard material irrespective of depth.	m ³	61		
	(c) Extra over subitem 61.02(a) for additional excavation required by the engineer after the excavation has been compacted.	m ³	0		
	(d) Extra over subitem 61.02(a) for excavation by hand.	m ³	10		
	(e) The volume of excavations in excess of the above mentioned limits. (Back excavation of vertical sides of excavations in earth for working space including backfilling compacted to 93% Mod AASTO density).				
	(f) Exceeding 0.5m and not exceeding 1.5m deep for placing and removing formwork to walls etc. 500mm away from excavated face.	m ³	77		
	(ii) Exceeding 1.5m and not exceeding 3.0m deep for placing and removing formwork to walls etc. 500mm away from excavated face.	m ³	2		
	<u>Risk of collapse of excavations.</u>				
	(g) Risk of bulk excavations not exceeding 1.5m deep.	m ²	110		
	(h) Risk of bulk excavations exceeding 1.5m deep.	m ²	107		
61.03	Access and drainage				
	(a) Access	Prov.sum	1		
TOTAL CARRIED FORWARD		AMOUNT CARRIED FORWARD			

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6100	FOUNDATIONS FOR STRUCTURES				
	(b) Drainage where no access has been provided.	Prov.sum	1	R 73,062.50	R 73,062.50
61.04	Backfill to excavations utilising:				
	(a) Material from the excavation	m³	268		
	(b) Imported material (G7)	m³	25.0		
	Overhaul in excess of 1.0km on excavated material and on material imported for backfill, foundation fill and fill of caissons.	m³ -km	59		
B61.51	Test pits as ordered by the engineer	No	4.00		
TOTAL CARRIED FORWARD		AMOUNT CARRIED FORWARD			

SECTION 6200: FALSEWORK, FORMWORK AND CONCRETE FINISH					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		AMOUNT	BROUGHT FORWARD		
62.02	Vertical formwork to provide:				
	(a) F1 Surface finish to:				
62.02(a)	(i) Foundation footings	m ²	45		
	(b) F2 Surface finish to:				
62.02(b)	(i) Piers	m ²	13		
	(ii) Abutments	m ²	31		
	(iii) Wingwalls	m ²	133		
	(iv) Deck	m ²	17		
	(v) Inverted beams	m ²	25		
62.03	Horizontal formwork to provide:				
	(a) F2 Surface finish to:				
62.03(b)	(i) Deck soffit	m ²	11		
B62.04	Inclined formwork to provide:				
	(a) F2 Surface finish to:				
B62.04(b)	(i) Inverted beams	m ²	83		
	(ii) Deck	m ²	28		
62.06	Formwork to form open joints between:				
	(a) Deck end and abutment (20mm)	m ²	3		
TOTAL CARRIED FORWARD		AMOUNT CARRIED FORWARD			

SECTION 6300: STEEL REINFORCEMENT FOR STRUCTURES					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
					AMOUNTBROUGHT FORWARD
63.01	Steel reinforcement for:				
	(a) Foundation footings				
63.01(a)	(i) Mild steel bars	t	0.2		
	(ii) high-yield-stress-steel bars (type indicated).	t	3.7		
	(b) Abutments				
63.01(b)	(i) Mild steel bars	t	0.2		
	(ii) High yield stress steel bars	t	0.5		
	(c) Wingwalls				
63.01(c)	(i) Mild steel bars	t	0.2		
	(ii) High yield stress steel bars	t	3.8		
	(e) Piers				
63.01(e)	(i) Mild steel bars	t	0.1		
	(ii) High yield stress steel bars	t	0.2		
	(f) Deck				
63.01(f)	(i) Mild steel bars	t	0.2		
	(ii) High yield stress steel bars	t	2.00		
	(g) Inverted beams:				
63.01(g)	(i) Mild steel bars	t	0.2		
	(ii) High yield stress steel bars	t	1.3		
TOTAL CARRIED FORWARD		AMOUNT CARRIED FORWARD			
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SECTION 6400: CONCRETE FOR FOR STRUCTURES					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		AMOUNT	BROUGHT FORWARD		
64.01	Cast in situ concrete:				
	<u>40MPa/19mm concrete.</u>				
64.01(a)	(a) Strip footings:	m ³	27.0		
	(b) Bases:	m ³	8.0		
	(c) Deck:	m ³	17.0		
	(d) Inverted beams:	m ³	12.0		
64.01(b)	(d) Abutments:	m ³	6.0		
	(e) Wing walls:	m ³	22.0		
	(e) Piers:	m ³	8.0		
	<u>15MPa/19mm concrete.</u>				
	(a) Foundations:	m ³	4.0		
B64.07	Curing of concrete:				
	(a) Deck soffit using an approved curing compound	m ²	65.0		
	(b) Deck top surface using moisture curing method	m ²	42.0		
	(c) Inverted beams	m ²	131.0		
	(d) Bridge substructure using an approved curing compound	m ²	13.0		
B64.08	Hot weather concreting	lump			R 58,500.00
	<u>Test cubes:</u>				
	(d) Making and testing 150 x 150 x 150mm concrete strength test cube:	No.	41.0		
	<u>Concrete Sundries.</u>				
	Finishing top surface of concrete to an evenly ribbed non-slip surface.				
	(f) Slabs to falls:	m ²	192		
	<u>75 MPa non-shrink grout.</u>				
	(g) Bedding approximately 10mm thick under 150 x 150mm base plate.	m ²	42		
TOTAL CARRIED FORWARD					

SECTION 6600: NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
66.13	Bearing strips:				
	(a) Nova-type MSB 400 structural bearing or similar approved	m ²	43		
66.19	Drainage pipes and weep holes:				
	(a) Drainage pipes:				
66.19(a)	(i) 80mm dia min 200mm long uPVC pipe deck drainage scuppers complete with socket and fittings as per drawings	No.	22		
	<u>miscellaneous</u>				
	Steel Hand Rails, welded to walkways:				
	(a) 50 x 50 x 3mm Hollow section rails:	m	320		
	(b) Extra over for flat closed end:	No.	4		
	(c) Extra over for T-Intersection:	No.	118		
	(d) Extra over for L-Intersection:	No.	4		
	(e) 50 x 50 x 3mm Hollow section post 1200mm long with flat closed top and 150 x 150 x 12mm base plate four times holed for bolts and welded on (bolts measured elsewhere):	No.	42		
	(f) Anchored with 4 No. M12 concrete anchor bolts:	No.	168		
	Paintwork on metal surfaces: One coat alkyd based zinc phospahte primer, one coat alkyd based universal undercoat and two coats superior quality enamel paint, on steel.				
	(g) Rails, bars pipes, etc. not exceeding 300mm girth:	m	370		
TOTAL CARRIED FORWARD					

TENDER NUMBER: COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 7300 CONCRETE BLOCK PAVING FOR ROADS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
73.00	CONCRETE BLOCK PAVING FOR ROADS				
73.01	Concrete block paving (SANS 1058)				
	(a) 80mm S-A light grey Interlocking paving blocks	m ²	150.0		
73.03	Provision of approved herbicide and ant poison.				
	(a) Provision of materials.	PC SUM	1		
	(b) Contractor's charges and profit added to the prime cost sum.	PC SUM	1		
TOTAL CARRIED TO SUMMARY					0.00

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TENDER NUMBER: COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SECTION 8100 TESTING MATERIALS AND WORKMANSHIP					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
81.02	TESTING MATERIALS AND WORKMANSHIP				
	Other special tests requested by the engineer				
	(a)Cost of Testing	Prov. Sum	1	200,000.00	200,000.00
	(b)Charge on Prime Cost sum	%			
81.3	Providing testing equipment				
	(a) Rolling straight edge	no	2		
8100	TOTAL CARRIED TO SUMMARY				

TENDER NUMBER:COM 20/2023 :CONSTRUCTION OF FOOT BRIDGE AT NYONGANE.

SUMMARY OF BILL OF QUANTITIES

ITEM	DESCRIPTION	AMOUNT			
		Tendered R . C			
1200	GENERAL REQUIREMENTS AND PROVISIONS				
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
1400	HOUSING OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE STAFF				
1700	CLEARING AND GRUBBING				
2100	DRAINS				
2300	CONCRETE KERBING,CONCRETE CHANNELING				
3300	MASS EARTHWORKS				
3400	PAVEMENT LAYERS				
5200	GABIONS				
6100	STRUCTURES				
7300	CONCRETE BLOCK PAVING FOR ROADS				
8100	TESTING MATERIALS AND WORKMANSHIP				
TOTAL SCHEDULE A					
ADD 10%CONTIGENCIES					
SUBTOTAL					
10% CONTRACT PRICE ADJUSTMENT (CPA)					
SUBTOTAL 1					
ADD 15% VAT					
TOTAL SCHEDULE A					