

NALA LOCAL MUNICIPALITY CONTRACT NO.

NLM/TS/004/2025-26

THE REFURBISHMENT OF SEWER PUMP STATION AND ERADICATION OF 250 BUCKETS IN EXT. 12 & 13 IN WESSELSBRON

PART C2

PRICING DATA

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2



NALA LOCAL MUNICIPALITY

CONTRACT NO.

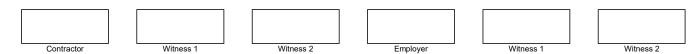
NLM/TS/004/2025-26

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PART C2: PRICING DATA

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THE REFURBISHMENT OF SEWER PUMP STATION AND ERADICATION OF 250 BUCKETS IN EXT. 12 & 13 IN WESSELSBRON

SECTION C2.1

PRICING INSTRUCTIONS

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Contractor	Witness 1	Witness 2	l	Employer		Witness 1	Witness 2

Contract NLM/TS/004/2025-26 Part C2: Pricing Data Section C2.1 Pricing Instructions



Pricing Assumptions mean the criteria as set out 'below, read together with all Parts of this contract document, which it will be assumed in the contract, that the tenderer has taken into account when developing his prices.

- 1. This Bill of Quantities has to be read together with the Articles of the Agreement, the Conditions of Contract and Special Conditions of Contract, the Form of Tender, the General Specification, the Project Specification and the Drawings.
- 2. The method of measurement published by the South African Bureau of Standards in clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SANS 1200 standardised specifications".
- 3. General instruction and description of the Work or materials given in the Specification will not be repeated in the Bill of Quantities. It will only be referred to in the Conditions of Contract(C-22) or, Special Conditions of Contract (SC-11), General Specification (19.1.3), Project Specification (PS 11) or to a Drawing.
- 4. The clauses in a specification in which further information regarding the schedule item appears under "Reference clause" in the Schedule. The reference clauses indicated are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SANS in the SANS 1200 series of specifications, e.g. G for SANS 1200 G.
- 5. The quantities set out in the Bills of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Engineer from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
- 6. The prices and unit prices given in the Bill of Quantities, are all-embracing prices and it should cover the values of the different items completely and have to include all costs and expenses which may occur and for the building of the Work as described and costs and expenses that are required as well as all general liabilities, obligations and risks which forms a part of this contract. The prices should be given separately in the item(s) if special accountability, responsibilities and risks as in the above occur.
- 7. A price or unit price has to be filled in against every item in the Bill of Quantities even if the amount isn't shown. Items where no price or unit price has been filled in will be regarded as covered by the other prices and unit prices in the Bill of Quantities. VAT must not be included in the tariffs.
- 8. The unit rates will be regarded as correct if any calculation errors occur. The total amount will be corrected according to the product of the item quantity and the unit rate. Unit prices will be calculated arithmetically in the case of omissions.
- 9. Payments will be made exclusively for items listed in the Bill of Quantities (BoQ). If the Contractor identifies an item that is not included, they must seek clarification during the tender period. Alternatively, the Contractor should allocate the cost of the unlisted item under a related item within the relevant section of the BoQ and clearly record this adjustment under Section T2.2.1, "Alterations by Tenderer," in the returnable documents of Volume 1 of the Tender Document.

10. I	Except where rates only are required, insert all amounts to be included in the total tendered price in the "Am	iount
(column and show the corresponding total tendered price.	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



11. The units of measurement described in the Bills of Quantities are metric units. Abbreviations which may be used in these Bills of Quantities are as follows:

Abbreviation	Meaning	Abbreviation	Meaning
%	per cent	MN	meganewton
ha	hectare	MN.m	meganewton-metre
h	hour	m	metre
kl	kilolitre	m^2	square metre
kg	kilogram	m².pass	square metre-pass
km	kilometre	mm	millimetre
kW	kilowatt	No.	number
1	litre	P C sum	Prime Cost sum
m^3	cubic metre	Prov sum	Provisional sum
m³.km	cubic metre-kilometre	sum	lump sum
MI	megalitre	t	ton (1000 kg)

The Employer has the right to inspect and correct any measurements and/or payments that were made before the final Payment Certificate. The Employer also has the right to deduct payment for any work not complying with the specifications before the submission of the final Payment Certificate.

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2



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SECTION C2.2

SCHEDULE OF QUANTITIES

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Part C2: Pricing Data



ITEM NO	PAYMENT REFERS TO		ESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
1	SANS 1200 A		: PRELIMINARY & GENERAL ARY & GENERAL				
	8.3	FIXED-CHA	ARGE ITEMS				
1.1	8.3.1	Contractual	requirements	-	-	Sum	
	8.3.2	Establishme	ent of facilities on Site				
	8.3.2.1 PSAB	a) <u>Facilitie</u>	es for the Engineer				
1.1.1	PSAB1	i) Na	ameboards (2 no.)	-	-	Sum	
1.1.2	PSAB2	ii) Fı	urnished offices (1 no.)	-	-	Sum	
1.1.3	PSAB3	iii) Te	elephone (1 no.)	-	-	Sum	
1.1.4	PSAB5	iv) Sı	urvey assistant	-	-	Sum	
1.1.5	PSAB6	v) Sı	urvey equipment	-	-	Sum	
1.1.6		51 or	aptop: ore i11 @ 4.7GHz, 16GB RAM, 12GB SSD, 1xUSB Port minimum, r similar approved, complete with Vindows 11 and MS Office Pro.	-	-	Sum	
1.1.7	PSAB7	vii) C	arport (1 no.)	-	-	Sum	
	8.3.2.2	b) <u>Facilitie</u>	es for the Contractor				
1.1.8	PSA		ffices and storage sheds (4 no.) ncluding meeting room/boardroom)	-	-	Sum	
1.1.9		ii) W	/orkshops	-	-	Sum	
1.1.10		iii) Al	blution and latrine facilities	-	-	Sum	
1.1.11		iv) To	ools and equipment	-	-	Sum	
1.1.12			ater supplies, electric power and ommunications	-	-	Sum	
1.1.13		vi) D	ealing with water (Sub-clause 5.5)	-	-	Sum	
1.1.14		vii) Ad	ccess (Sub-clause 5.8)	-	-	Sum	
1.1.15		viii) Pl	lant	-	-	Sum	
1.1.16		ix) Si	ite security for duration of contract	-	-	Sum	
	Carried forw	ard					

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Part C2: Pricing Data



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	ard				
1.1.17	8.3.3	Other fixed-charge obligations	-	-	Sum	
1.1.18	8.3.4	De-establishment of site	-	-	Sum	
1.2	8.4	TIME-RELATED ITEMS				
1.2.1	8.4.1	Contractual requirements	months	12		
	8.4.2	Operation and maintenance of facilities on the Site for the duration of construction				
	8.4.2.1	a) <u>Facilities for the Engineer</u>				
1.2.2	PSAB2	i) Furnished offices	months	12		
1.2.3	PSAB3	ii) Cellular Phone, Airtime and Data	months	12		
1.2.4	PSAB5	iii) Survey assistant	months	12		
1.2.5	PSAB6	iv) Survey equipment	months	12		
1.2.6		v) Computer	months	12		
1.2.7	PSAB7	vi) Carport	months	12		
	8.4.2.2	b) <u>Facilities for the Contractor</u>				
1.2.8		 Offices, storage sheds, boardroom and campsite 	months	12		
1.2.9		ii) Workshops	months	12		
1.2.10		iii) Living accommodation	months	12		
1.2.11		iv) Ablution and latrine facilities	months	12		
1.2.12		v) Tools and equipment	months	12		
1.2.13		vi) Water supplies, electric power and communications	months	12		
1.2.14		vii) Dealing with water (Sub-clause 5.5)	months	12		
1.2.15		viii) Access (Sub-clause 5.8)	months	12		
1.2.16		ix) Plant	months	12		
1.2.17		x) Site Security for duration of contract	months	12		
	Carried forw	ard				

Contractor	Witness 1	Witness 2	•	Emplover	•	Witness 1	Witness 2

Part C2: Pricing Data



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard				
1.2.18	8.4.3	Supervision for duration of construction	months	12		
1.2.19	8.4.4	Company and head office overhead costs for the duration of the contract	months	12		
1.2.20	8.4.5	Other time-related obligations (specify below):	months	12		
1.3	PSA9 PSA10	OCCUPATIONAL HEALTH AND SAFETY & ENVIRONMENTAL MANAGEMENT				
	PSA.9	FIXED-CHARGE ITEMS Occupational Health and Safety				
	PSA.9.1 OHSA CR GAR GSR	Compliance with Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employers Health and Safety Specification:				
1.3.1	GOIT	a) Allow for the cost compiling a Safety Plan as required in the specifications for the Principal Contractor / Contractor (All appointed sub - contractors to provide safety plans)	-	-	Sum	
1.3.2		b) Allow for the cost of the Notification of Construction Work by the Principal Contractor / Contractor	-	-	Sum	
1.3.3		c) Allow for the cost of a copy of OHS Act 85 of 1993 (Book or poster form. To be displayed in the site office)	-	-	Sum	
1.3.4		d) Allow for the costs of required Risk Assessments and method statements (Risk Assessments must include all Safe Work Procedures).	-	-	Sum	
1.3.5		e) Allow for the costs to compile all Health and Safety Inspection Registers for required tasks.	-	-	Sum	
	Carried forw	ard				

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2

Part C2: Pricing Data



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
		Health and Safety Training:				
1.3.6		Allow for the costs of all revelant training on site	-	-	Sum	
1.3.7		b) General Safety Induction Training of all employees on site	-	-	Sum	
		Personal Protective Equipment (PPE) required on site:				
1.3.8		a) First Aid Box (fully stocked)	No.	1		
1.3.9		b) 9.2.9Kg Dc STP Fire Extinguishers	No.	4		
1.3.10		c) Dust Masks	No.	50		
1.3.11		d) Safety Goggles	No.	20		
1.3.12		e) Gloves (leather/PVC)	No.	20		
1.3.13		f) Hard hats	No.	20		
1.3.14		g) Barrier tape (Netting)	m	1 000		
1.3.15		h) Reflective Vests	No.	25		
1.3.16		i) Traffic Control Sign Boards	No.	10		
1.3.17		j) Prohibitive Symbolic Signs (near Diesel / Flammable Fluid Storage).	No.	5		
	PSA.10	Environmental Management				
1.3.18		Development and provision of an Environmenta Management Plan	 -	-	Sum	
1.3.19	PSA.10.1	Compliance with Environmental Management Plan	-	-	Sum	
		TIME-RELATED ITEMS				
	PSA9	Occupational Health and Safety				
	PSA9.2	Compliance with Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employers Health and Safety Specification:				
	Carried forw	vard				

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	Contractor	Witness 1		Witness 2		Employer		Witness 1		Witness 2

Part C2: Pricing Data



ITEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard					
1.3.20		a)	Full-time supervision by a registered construction health and safety officer for the duration of construction	months	12		
1.3.21			i) Stationary for health and safety officer	months	12		
1.3.22		b)	Security control for the duration of construction	months	12		
1.3.23			i) Stationary and registers for security personnel and access control	months	12		
1.3.24		c)	Refresher training where required during construction	months	12		
1.3.25		d)	Refilling of first aid kits for the duration of construction	months	12		
1.3.26		e)	Praffic accommodation for the duration of construction, inclusive of a traffic managament plan and traffic safety officer		12		
	PSA10	<u>En</u> v	vironmental Management				
1.3.33	PSA10.2		mpliance with Environmental nagement Plan	months	12		
1.4	PSA.12		MS STATED PROVISIONALLY BY E ENGINEER				
		Eng	gineer's requirements:				
1.4.1	PSA12.3	a)	CLO/LDO remuneration	-	-	Prov sum	90 000.00
1.4.2		b)	Overheads, charges and profit on the above	%	90 000		
1.4.3	PSA12.3	c)	PSC remuneration	-	-	Prov sum	5 400.00
1.4.4		d)	Overheads, charges and profit on the above	%	5 400		
1.4.5	PSA12.10	e)	Locating existing services	-	-	Prov sum	15 000.00
1.4.6		f)	Overheads, charges and profit on the above	%	15 000		
	Carried forw	/ard		ı		1	

Contractor	 Witness 1	Witness 2	•	Employer	•	Witness 1	Witness 2

Part C2: Pricing Data



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
1.4.7	PSA12.12	g) Professional or specialist services:	-	-	Prov sum	75 000.00
1.4.8		h) Overheads, charges and profit on the above	%	75 000		
		Community requirements:				
1.4.9	PSA12.4	Accredited and approved training courses for selected local and other labourers	-	-	Prov sum	30 000.00
1.4.10		 Overheads, charges and profit on the above 	%	30 000		
		Refurbishment & commissioning of existing services:				
1.4.11	PSA12.11	Relocation of existing municipal services not related to the sewer reticulation	-	-	Prov sum	15 000.00
1.4.12		 Overheads, charges and profit on the above 	%	15 000		
1.4.13	PSA12.11	Allowance for Eskom / Council transformer upgrade / new connection point	-	-	Prov sum	315 000.00
1.4.14		b) Overheads, charges and profit on the above	%	315 000		
1.5		TEMPORARY WORKS				
1.5.1	8.8.1	Maintain access road to the works	-	-	Sum	
1.5.2	8.8.2	Deal with traffic or accommodate traffic (as instructed by Engineer)	-	-	Sum	
1.5.3	8.8.5 PSA 5.1	Cost of survey in terms of project specification and land survey act	-	-	Sum	
	TOTAL OF	SECTION 1 CARRIED TO SUMMARY				
	l					

Contractor	,	Witness 1	1	Witness 2	,	Emplover	1	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
2		SECTION 2: GOLF COURSE PUMP STATION - CIVIL WORKS				
		EXISTING BUILDINGS				
2.1	Part. Spec. PB	Existing Buildings - Repair Work				
2.1.1	8.2.22	Repair channel walls	-	-	Prov sum	47 000.00
2.1.2	8.2.9	Seal all channel corners with Sika product	-	-	Prov sum	145 000.00
2.1.3	8.2.22	Repair and grout sluice gate slides	No.	3		
2.1.4	8.2.22	Supply and install a 160 NB PVC suction pipe in the pump station to change the suction from final effluent Prov Sump and not the supernatant Prov Sump	-	-	Prov sum	119 000.00
2.1.5		Replace hand railing in pump station	-	-	Prov sum	52 000.00
2.1.6		Supply and install HDG RS40 25x4,5 grating	-	-	Prov sum	158 000.00
2.1.7		Hydraulic testing of rising main line and associated valves from pump station to WWTW, inlcuding all fittings and testing equipment required	m	1500		
2.1.8		Inspect and repair water retaining concrete structures. Repair and seal cracks and seal Prov Sump with approved ABE sealer	-	-	Prov sum	110 000.00
		NEW BUILDINGS				
2.2	SANS 1200 C	Site Clearance & Security				
2.2.1		Clear and grub areas	ha	0.2		
2.2.2	PSC 8.2.12	Maintenance on existing fencing and gate	-	-	Prov sum	45 000.00
2.2.3	PSC 8.2.13	Hydrojet cleaning of blocked sewer lines (Supply all equipment and operate high pressure pumps and jets to clear blocked pipe sections):				
		a) Supply of all equipment complete to hydrojet existing pipelines	-	-	Sum	
	Carried forw	ard				

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.2.4	PSC 8.2.14	b) Operate and maintain equipment, including labour, fuel and other consumables, to clear blocked sewer pipes of various sizes up to 400 mm ø, remove debris from manholes and dump at municipal dump sites. Combination vacuum/jetting trucks to pump	m	2250		
		out blocked manholes. (Supply tanker trucks complete with vacuum pumps to empty blocked manholes and cart sewer to the nearest WWTW):				
		a) Supply of combination trucks	No.	1		
		b) Operate and maintain the tanker including all running costs per manhole emptied and degritting of manhole	No.	50		
2.2.5		Dewatering and cleaning of existing pump station structures	m³	20		
2.3	SANS 1200 D	Excavations				
	8.3.2	Excavate in all materials for structure foundations and use for backfill or stockpile:				
2.3.1		a) Reduced levels under floors	m³	33		
2.3.2		b) Trenches	m³	10		
	8.3.2	Extra over items 2.3.1 - 2.3.2 above for:				
2.3.3		a) Hard rock	m³	5		
	8.3.6	Extra over all excavations for carting away:				
2.3.4		Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m³	31		
2.4	SANS 1200 DA	Infill under new structures				
2.4.1	8.3.5 SANS	Importing of G5 material from commercial sources for selected layer under structures	m³	17		
2.4.2	1200 DM 8.3.5	Selected layer compacted to 98% of modified AASHTO maximum density	m³	17		
	Carried forw	rard				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.5		Testing				
2.5.1		Allow for the execution of standard Modified AASHTO Density test to the entire satisfaction of the Agent by an approved institution on the site, including payment of all costs involved	m²	66		
2.6		Soil Poisoning				
2.6.1		Approved weedkiller under floors, aprons, ramps, steps, paving, etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m²	73		
2.7	SANS	Reinforced Concrete				
2.7.1	1200 G 8.4.3	Concrete Grade 30MPa/19mm in floors	m³	15		
2.7.2	8.4.3	Concrete Grade 15MPa/19mm in roofs with QC Panels, dimension 95/165	m³	6		
2.8	8.2.2	Formwork				
2.8.1		Smooth formwork to sides; edges and risers not exceeding 300mm wide (Degree of Accuracy II)	m²	25		
2.9		Reinforcement				
2.9.1	8.3.1	High-tensile steel bars in the following:				
		a) Concrete roofs (up to Y25)	t	1		
		b) Raft beams (up to Y25)	t	1		
2.9.3		Type BS Ref 193 fabric reinforcement in concrete surface beds, slabs, etc.	m²	77		
2.9.4		Type BS Ref 395 fabric reinforcement in concrete surface beds, slabs, etc.	m²	21		
	Carried forw	vard				
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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



Fall li	flasonr foundate foundate foundate non clase nternal i) Brice mon i) sir brick Brickwo final Brickwo Brickwo Brickwo	ctions (Provisional): ckwork of NFX bricks (14 MPa minal compressive strength) in ss I mortar and External Face Brickwork: ckwork of FBS bricks in class II tar: Two brick wall ckwork of NFP bricks in class II	m² m² No.	10 75 10 8		
III a	Foundation on class of ternal of the class of ternal of te	ctions (Provisional): ckwork of NFX bricks (14 MPa minal compressive strength) in ss I mortar and External Face Brickwork: ckwork of FBS bricks in class II rtar: Two brick wall ckwork of NFP bricks in class II rtar: One brick wall s, external rk Sundries:	m² m²	75 10		
.2.2 A	i) Brickon non class nternal i) Brickon ii) ii) sir brick Brickwo	skwork of NFX bricks (14 MPa ninal compressive strength) in ss I mortar and External Face Brickwork: skwork of FBS bricks in class II rtar: Two brick wall skwork of NFP bricks in class II rtar: One brick wall s, external rk Sundries:	m² m²	75 10		
.2.2 A	non class nternal i) Bric mon i) Bric mon ii) Brick Brickwo Brickwo	ninal compressive strength) in as I mortar and External Face Brickwork: skwork of FBS bricks in class II rtar: Two brick wall skwork of NFP bricks in class II rtar: One brick wall s, external rk Sundries:	m² m²	75 10		
.2.2 A	i) Brid moi i) Brid moi i) sir brick Brickwo	kwork of FBS bricks in class II tar: Two brick wall kwork of NFP bricks in class II tar: One brick wall s, external rk Sundries:	m²	10		
.2.2 <i>A</i>	i) Brice mon i) sir brick Brickwo Brice	Two brick wall kwork of NFP bricks in class II tar: One brick wall s, external rk Sundries:	m²	10		
.2.2 A	i) Brick moi i) sir brick Brickwo	ckwork of NFP bricks in class II rtar: One brick wall s, external rk Sundries:	m²	10		
.2.2 A	moi i) sir brick Brickwo s) Bric	rtar: One brick wall s, external rk Sundries:				
E	vir brick Brickwo	s, external rk Sundries:				
E	Brickwo) Bric	rk Sundries:	No.	8		
) Bric					
а	,	kwork reinforcement:				
	i)	75mm Wide reinforcement built in horizontally	m	35		
	ii)	150mm Wide reinforcement built in horizontally	m	63		
b) Gal	vanised hoop iron cramps, ties, etc:				
	i)	1.2mm x 35mm hoop iron brick tie, twice shot, pin to concrete once bent and build into brickwork	No.	100		
C) "Co	ncrete" prestressed fabricated lintels:				
	i)	100 x 70mm Lintels in lengths not exceeding 3m	m	7		
2.10	/loveme	ent Joints, etc.:				
a			m	10		
	2.10 N	c) "Co i) 2.10 Moveme a) Exp betv	twice shot, pin to concrete once bent and build into brickwork c) "Concrete" prestressed fabricated lintels: i) 100 x 70mm Lintels in lengths not exceeding 3m 2.10 Movement Joints, etc.:	twice shot, pin to concrete once bent and build into brickwork c) "Concrete" prestressed fabricated lintels: i) 100 x 70mm Lintels in lengths not exceeding 3m m 2.10 Movement Joints, etc.: a) Expansion joints with 10mm "Jointex"	twice shot, pin to concrete once bent and build into brickwork c) "Concrete" prestressed fabricated lintels: i) 100 x 70mm Lintels in lengths not exceeding 3m m 7 2.10 Movement Joints, etc.: a) Expansion joints with 10mm "Jointex" between vertictal brick surfaces m 10	twice shot, pin to concrete once bent and build into brickwork c) "Concrete" prestressed fabricated lintels: i) 100 x 70mm Lintels in lengths not exceeding 3m m 7 2.10 Movement Joints, etc.: a) Expansion joints with 10mm "Jointex" between vertictal brick surfaces m 100

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		C2.	2-11		



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.10.6		Joint Sealants, etc.:				
		Sikaflex Pro 3I sealing compound, including backing cord, bond breaker, primer, etc.:				
		i) 10 x 10mm Joint sealant, including 15mm diameter dura cord in joint	m	30		
2.11	PB 8.2.9	Waterproofing				
2.11.1		Damp-proofing of walls and floors:				
		a) One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course in walls	m²	10		
		b) One layer of 250 micron thickness waterproof sheeting sealed at laps with pressure sensitive tape according the manufacturer's spec. under rafts, etc.	m²	42		
2.11.2		Roof waterproofing:				
		Sikalastic 560 - 1.5mm system with Sika Reemat Premium applied as per suppliers specification	m²	75		
2.12	PB 8.2.17	Joinery				
2.12.1		Countertops:				
		a) 32mm thick postform countertop, fixed to wall	No.	1		
2.12.2		Internal Doors:				
		a) Approved solid core flush doors with 3,2mm thick tempered hardboard covering on both sides and two matching concealed vertical edge strips, hung to steel frames:				
		i) 40mm Door 813 x 2 032mm high	No.	1		
	Carried forw	vard				

Contractor Witness 1	Witness 2 C2.2-	Emplover	Witness 1	Witness 2
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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.13	PB 8.2.18	Metalwork				
2.13.1		Ironmongery fixed to doors, etc, unless described as plugged:				
		a) Assa Abloy "CZ80941CH" indicator bolt with keep fixed to metal	No.	1		
2.13.2		Locks:				
		a) Assa Abloy 64mm "3122/64" padlock with two keys	No.	5		
		b) "CZ682-24CH/2277-78SC" three lever lockset with striking plate to metal	No.	1		
2.13.3		Bathroom Fittings:				
		a) Wall mounted stainless steel two roll toiletpaper holder	No.	1		
		b) Wall mounted stainless steel soap dispenser	No.	1		
2.13.4		Sundries:				
		a) 38mm Diameter rubber door stop plugged to brickwork or concrete	No.	2		
2.13.5		Burglar Screens:				
		a) Constructed of 25 x 25 x 2,5mm Square hollow sections covered with expanded metal sheets the whole on 100mm long stays with connection plate welded on and bolted to walls	No.	3		
2.13.6		Pressed Steel Door Frames:				
		a) 1,2mm double rebated frames suitable for half brick walls and power floated floor finish:				
		i) Frame for door 813 x 2032mm high	No.	1		
	Carried forw	rard				

Contractor	Witness 1	Witness 2	,	Emplover	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.13.7		Steel Windows, Doors, etc.:				
		a) Powder coated aluminium windows glazed with 4mm obscured glass and plugged to brickwork or concrete				
		i) Window PT69, size 600 x 900mm high	No.	1		
		ii) Slideable window PT915, size 900 x 1500mm high	No.	2		
		iii) Double transformer room door type DVV with two vents per leaf painted with one red oxide and two enamel coat, 1830 x 2440mm	No.	1		
		iv) Solid aluminium panel door - 900w x 2100h pre-hung and weather resistant	No.	1		
2.14	PB 8.2.6	Plastering				
2.14.1		Internal Cement Plaster on Brickwork				
		a) On walls	m²	85		
2.15	PB 8.2.7	Floor Screeds				
2.15.1		Normal screeds:				
		a) 25mm thick on floors and landings	m²	23		
2.16	PB 8.2.5	Tiling				
2.16.1		Wall Tiling				
		a) 200 x 200 x 6mm thick coloured glazed ceramic tiles fixed with adhesive according the manufactorer's spec. to plastered walls (plaster elsewhere measured)	m²	2		
	Carried forw	ard				

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.16.2		Floor Tiling				
		Approved Porcelain tiles strictly in accordance with the manufacturer's spec. and to the satisfaction of the Employer's Agent on floors, landings and door openings	m²	23		
		b) Tile skirtings, 100mm high, using the same tiles as floor tiling above	m	16		
2.16.3		Sundries				
		a) Approved tile expansion joint :				
		i) "Genesis Trim Plus ETP 648" approved white tile edge trim for 5 to 6,5mm thick tiles	m	10		
		b) Extra for two-way intersection piece	No.	10		
2.17	PB 8.2.22	Plumbing and Drainage				
2.17.1		Sanitary Fittings as described (or other approved):				
		a) Franke stainless steel drop on double bowl sink	No	1		
		b) Lecico Atlas medical 492 x 600 x 210mm white vitreous china porcelain basin fixed with stainless steel screws, washers and				
		plugs to wall c) Lecico Atlas semi pedestal 500mm	No	1		
		white vitreous china porcelain basin	No	1		
		d) Vaal Hibiscus close coupled suite (code 772654), wash down pan (code 772600), 9 litre front single flush cistern (code 710533), complete with lid,				
		fitments	No	1		
2.17.2		Waste Unions				
		a) Cobra Watertech 32mm 308 basin waste union	No	1		
	Carried forw	rard				

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard				
		b) Cobra Watertech 38mm 317 sink waste union	No	1		
2.17.3		Traps				
		a) 32 x 40mm Deep seal uPVC "P" or S trap	No	1		
		b) 40mm Combination flexi trap	No	1		
2.17.4		Taps, Valves, Etc				
		a) 15mm "1075-15" fullway ballcock	No	1		
		b) 15mm 232-10 angle regulating valve	No	3		
		c) 15mm "503-21B" elbow action pillar tap	No	1		
		d) 15mm pillar single mixer	No	1		
2.17.5		Sanitary Plumbing				
		a) PVC pipes:				
		i) 50mm Soil, waste or ventilation pipes, etc fixed to or in walls, ceilings, roofs, floors, columns, slabs, etc	m	4		
2.17.6		Extra over PVC pipes for fittings:				
		a) 110 x 50mm excentric reducer	No	1		
		b) 110mm pan connector	No	1		
		c) 110mm access venthorn bend	No	1		
		d) 110 x 110 x 50mm access reducing junction	No	1		
		e) 50mm "GI Two-way" vent valve	No	1		
2.17.7		Testing of sanitary plumbing installations	Sum	1		
2.18	PB 8.2.22	Furniture:				
2.18.1		Office chair with wheels	No	2		
	Carried forw	ard				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.19	PB 8.2.22	Water Supply and Fire Service				
2.19.1		Polycop pipes:				
		a) 15mm Pipes to or in walls, ceilings, roofs, floors, columns, slabs, etc.	m	3		
		b) 22mm Pipes to or in walls, ceilings, roofs, floors, columns, slabs, etc.	m	5		
2.19.2		Extra over Polycop pipes for capillary fittings:				
		a) 15mm Fittings	No	2		
		b) 22mm Fittings	No	3		
2.19.3		Extra over Polycop pipes for compression fittings:				
		a) 15mm Fitting	No	2		
		b) 22mm Fittings	No	3		
2.19.4		Testing of water supply installations	Sum	1		
2.19.5		Fire Appliances				
		a) Chubb 9kg dry chemical fire extinguishers	No	2		
2.20	PB 8.2.22	Glazing				
2.20.1		Tops, Shelves, Doors, Mirrors, etc.:				
		a) 6mm silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete				
		i) Mirror 450 x 600mm high with four screws	No	1		
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	Carried forw	I vard				
	Carried forw	vard				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.21	PB 8.2.20	Paintwork				
2.21.1		On Floated Plaster:				
		a) One universal undercoat and two coats "Dulux" pure acrylic paint on internal walls	m²	106		
2.21.2		On Wood:				
		a) One wood primer, one unversal undercoat and two coats "Dulux" enamel on door	m²	2		
2.21.3		On roof slab panels:				
		a) One coat primer and two coats "Dulux" pure acrylic paint on underside of roof slabs	m²	10		
2.22	SANS 1200 L	Water Connection				
2.22.1	1200 L	Water connection by Local Authority	-	-	Prov sum	10 000.00
2.22.2		Profit and handling fee	%	10000		
2.22.3	8.2.13	Valve chamber 1.16 x 0.60 x 0.85m deep internally with 2x isolating valve, T-piece, non-return valve and water meter for main municipal water connection	-	-	Prov sum	7 500.00
2.22.4	SANS 1200 DB	Excavate in all materials for trenches, backfill, compact and dispose of surplus material:				
	8.3.2	a) Trench excavation in earth not exceeding 2m deep	m³	2.5		
2.22.5	SANS 1200 LB	Pipe Bedding:				
	8.2.2	a) Approved selected granular filling supplied by the contractor:				
		i) Under and fiilling arround pipes, etc	m³	0.5		
	Carried forw	<u>l</u> vard			<u> </u>	

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
		SEWER MAINS				
2.23	SANS 1200 DB	Earthworks (Pipe Trenches)				
2.23.1	PSDB 8.3.2	Excavate in all materials for trenches, backfill, compact and dispose of surplus material:				
		a) Pipes up to 700 mm dia for depths:				
		i) up to 1,0m	m³	75		
		ii) from 1,01m up to 2,0m	m³	75		
2.23.2	PSDB 8.3.2	Extra over item 2.22.1 above for:				
	0.0	a) Hard rock excavation	m³	20		
2.24	SANS 1200 LD	Sewers				
2.24.1	8.2.1	Supply, lay, joint, bed, test and backfill uPVC "Durodrain" or similar approved solid wall HD class 34 pipeline:				
		a) 110mm dia.	m	100		
		b) 160mm dia.	m	-		Rate Only
2.24.2	8.2.3	Precast concrete manhole with sacrificial layer with SANS558 type 2A cover and frame: (as per dwg. no. 35341-BCN-ZZZ-00-DR-CIV-133-TS-002 & 35341-BCN-ZZZ-00-DR-CIV-133-TS-004) a) DN 1000mm, complete as per drawings, for depths:				
		i) Depth to invert up to 1,0m	No.	1		
		ii) Depth to invert from 1,01m to 1,5m	No.	1		
		iii) Depth to invert from 1,51m to 2,0m	No.	-		Rate Only
		iv) Depth to invert from 2,01m to 2,5m	No.	-		Rate Only
	Carried forw	vard				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.24.3	8.2.4	Extra over Item 2.23.2 for Backdrops, etc.				
		a) High inlet ramp type complete as per dwg. 35341-BCN-ZZZ-00-DR-CIV-133-TS-003	No.	-		Rate Only
		b) High inlet vertical drop type complete as per dwg. no. 35341-BCN-ZZZ-00-DR-CIV-133-TS-003	No.	-		Rate Only
2.24.4	PSLD 8.2.11	Connection to existing manholes for depths:				
	0.2.11	a) Depth to invert up to 1,0m	No.	1		
		b) Depth to invert from 1,01m to 1,5m	No.	1		
		c) Depth to invert from 1,51m to 2,0m	No.	-		Rate Only
		d) Depth to invert from 2,01m to 2,5m	No.	-		Rate Only
2.24.4		Manhole repairs:				
		a) Repair existing manhole with calcium aluminate mortar (Sika MonoTop 4400 MIC or similar approved; as per dwg. no. 35341-BCN-ZZZ-00-DR-CIV-133-TS-004, detail R1)				
		i) Depth to invert up to 1,0m	No.	1		
		ii) Depth to invert from 1,01m to 1,5m	No.	1		
		iii) Depth to invert from 1,51m to 2,0m	No.	1		
		iv) Depth to invert from 2,01m to 2,5m	No.	1		
2.25	SANS 1200 LB	Bedding for sewer pipes				
2.25.1	8.2.2	Supply only of bedding by importation:				
		a) From commercial sources:				
		i) Selected granular material	m³	25		
		ii) Selected fill material	m³	15		
	Carried forw	vard	<u>I</u>			

Contractor	 Witness 1	Witness 2	,	Employer	1	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
2.25.2		Underdrains: (where instructed by the Engineer; as per dwg.35341-BCN-ZZZ-00-DR-CIV-133-TS-001, Detail U1)				
	PSME 8.3.3	a) 200mm thick, 19mm stone bedding placed in trench and compacted	m³	4		
	PSLB 8.2.7	b) Geotextile wrapping around the bedding (Bidim U24 or approved equivalent)	m²	54		
		INTERNAL ROADS				
2.26	SANS	Earthworks (Roads & Subgrade)				
2.26.1	1200 DM 8.3.2	Preparation of Site:				
		Removal of topsoil to a maximum depth of 150mm, hauling and spreading of topsoil to a minimum depth of 100mm	m³	75		
2.26.2	8.3.3	Treatment of roadbed:				
		a) Roadbed preparation and compaction of material to:				
		i) Minimum of 93% of modified AASHTO maximum density	m³	75		
2.26.3		Weed control:				
		Supply, deliver to site and place weed control fabric over the roadbed area	m²	500		
2.27	SANS 1200 MF	Base				
2.27.1	8.3.3	Construct base with material from commercial sources:				
		a) 19mm Graded crushed stone, in 100mm thick layer	m³	50		
	TOTAL OF	SECTION 2 CARRIED TO SUMMARY				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
3	Part. Spec. PSM	SECTION 3: GOLF COURSE PUMP STATION - MECHANICAL WORKS				
3.1		Manufacture, supply, deliver, transport, handle, protect, store, install, commission and uphold during the Defects Liability Period, complete with all frames, bolts, nuts, etc. (motors measured elsewhere):				
3.1.1	PSM 17	Mechanical fine screen for 800mmx1505mm inlet channel. Screen body type to be 304s/s	No.	1		
3.1.2	PSM 18	Manual rake bar screen for 800mmx1505mm inlet channel. Screen body type to be 304s/s	No.	1		
3.1.3	PSM 19	Impact screw compactor with a wash system type of high pressure 3-4 bars and wash water flow no more than 100l/min. Discharge point no more than 1800mm (or to fit with the skip bin height). Body material to be 304s/s	No.	1		
3.1.4		Sewage skip bin for impact screw compactor. Approx. 1300x2500mm (HxW)	No.	2		
3.1.5	PSM 20	De-gritting spiral conveyor for pista trap, with a feed capacity of no more than 1m³/h. Body material to be 304s/s	No.	1		
3.1.6	PSM 21	Pista trap paddler with 2 paddles for pista trap. Body material to be 304s/s	No.	1		
3.1.7	PSM 22	Submersible sump pump to drain the pump station if and when necessary. Cornell pump, flow = 2-5 l/s, max. static head = 5-7.5m, with 60mm mild steel main delivery pipe	No.	1		
3.1.8	PSM 23	Sewage pumps for the pump station. 2 x Cornell 3STX pumps, 200mm mild steel main suction pipe, 160mm mild steel main delivery pipe, 14 l/s flow, 6.75m - 9.5m static head, and 2m - 2.4m suction head	No.	2		
3.1.9	PSM 24	Screw pumps for the pump station inlet works. 2 x screw pumps complete with archimedean screws, bearings, drive unit, screw trough and splash plates	No.	2		
	Carried forw	vard				

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
I	Brought forv	vard				
3.1.10	PSM 25	Channel sluice gates, manually activated:				
	DOM OF F	No manufacturing or fabrication may happen prior to onsite conditions being confirmed. Channel to be measured on site to ensure sluice gate fit installation.				
	PSM 25.5 Item 1	a) Mechanical screen inlet sluice gate	No.	1		
	Item 2	b) Hand screen inlet sluice gate	No.	1		
	Item 3	c) Mechanical screen outlet sluice gate	No.	1		
	Item 4	d) Hand screen outlet sluice gate	No.	1		
	Item 5	e) Pista Trap inlet sluice gate	No.	1		
	Item 6	f) Pista Trap bypass sluice gate	No.	1		
	Item 7	g) Pista Trap outlet sluice gate	No.	1		
3.2	PSM 23	Supply, Installation, Testing and Commisioning of pipework and valves				
		No manufacturing or fabrication may happen prior to onsite conditions being confirmed. Pipework to be measured on site to fit installation.				
3.2.1		Complete supply & installation of Special Pipe fittings and valves (Class PN10) at the pump station, complete including all bolts, material and labour required. All steel specials to be FBE 316 hot dipped galvanized steel and epoxy coated to SANS 719 (200 microns). Flanges drilled to SANS 1123 Table 1000/3:				
		a) 200x65mm dia. mild steel flanged eccentric reducer (length = ±327mm) [Item S1]	No.	2		
		b) 200mm dia. mild steel flanged 90° medium radius bend with a mechanical pressure gauge (Wika model 232.50 or smilar approved) [Item S2]	No.	2		
		c) 200mm dia. HDPE flange adaptor (to suit 225mm dia. HDPE) [Item S3]	No.	2		

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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ITEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard					
		d)	225mm dia. HDPE PE100 PN10 pipe (length = ±1500mm) [Item S4]	No.	2		
		e)	355x225mm dia. HDPE PE100 PN10 bellmouth [Item S5]	No.	2		
		f)	150x65mm dia. mild steel flanged concentric reducer (length = ±279mm) [Item D1]	No.	2		
		g) 150mm dia. mild steel flanged PN10 non-return valve [Item D2]		No.	2		
		h)	150mm dia. mild steel flanged PN10 RSV gate valve with handwheel [Item D3]		2		
		 i) 150mm dia. mild steel dismantling joint [Item D4] j) 150mm dia. mild steel flanged 90° medium radius bend [Item D5] k) 150mm dia. mild steel straight piece, both ends flanged (length = ±500mm) [Item D6] 		No.	2		
				No.	2		
				No.	2		
		I)	150mm dia. mild steel flanged 45° medium radius bend [Item D7]	No.	2		
		m)	150mm dia. mild steel straight piece, both ends flanged (length = ±1000mm) [Item D8]	No.	1		
		n)	150x150mm dia. mild steel flanged 45° lateral (length = ±457mm) [Item D9]	No.	1		
		0)	150mm dia. mild steel straight piece, both ends flanged, with puddle flange (length = ±918mm) [Item D10]	No.	1		
		p)	150mm dia. mild steel straight piece, both ends flanged (length = ±2000mm) [Item D11]	No.	1		
		q)	150mm dia. PVC-U flange adaptor (to suit 160mm dia. PVC-U) [Item D12]	No.	1		
3.2.2		Alte	rations to existing mild steel pipework	m	5		

Contractor	 Witness 1	Witness 2	,	Employer	1	Witness 1	Witness 2



TEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
4		SECTION 4: GOLF COURSE PUMP STATION - ELECTRICAL WORKS				
		SUPPLEMENTARY PREAMBLES				
		Specifications, drawings, etc				
		Tenderers are referred to the specification and drawings prepared by the Consulting Engineer, annexed to these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.				
		Preliminaries				
		Any preliminaries that may be required by subcontractors are to be included in the itemised rates or included with the main contractor's preliminaries as no separate preliminary items have been provided for pricing nor will such separate items be accepted.				
		Distribution boards and Kiosks				
		Rates for distribution boards etc are to include for busbars, jumpers, neutral bars, internal wiring and connections, circuit identification markers, control gear labels, circuit legend cards and shop drawings. Complete to be as per SANS specifications.				
		Distribution boards and Kiosks plinths				
		Rates for DB and Kiosk plinths are to be inclusive of excavation and backfill next/ around it to be level and concrete to specified strength.				
		Cables				
		Rates for cables are to include laying of the cables in trenches (measured elsewhere), installation in cable ducts (measured elsewhere), installation in trays (measured elsewhere) and installation in sleeves (measured elsewhere) and roof spaces incl. cable saddles, as per manufacturers spec. and SANS standards. Cable ends to be sealed until connection takes place.				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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TEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard				
		Sleeves				
		Rates for sleeves are to include laying/ installation of sleeves in trenches (measured elsewhere) and chasing and installation into walls. The rate shall include 1.6mm draw wire, sleeve couplings and ends.				
		Draw boxes and manholes				
		Rates for manholes and draw boxes are to include benching, drilling of holes through as per amount of sleeves/cables to enter installation and complete with cover slabs and lid.				
		Light fittings				
		Rates for light fittings are to include for hanging, fixing and connecting and for lamp holders and fluorescent tubes and lamps of the type and wattage described the rate includes brackets etc.				
		Switches, socket outlets, etc				
		Rates for switches, socket outlets, etc are to include for screwing to outlet boxes, connecting up and cover plates.				
		Materials arising from the demolitions				
		Materials arising from the demolitions will become the property of the contractor unless stated otherwise for reuse.				
		Quantity breakdown				
		In this Section of the Bills of Quantities a breakdown of the total quantities into the various locations is indicated below each description to each as follows: SITE - It should be noted that due to the rounding off factor marginal differences can occur between the sum of the parts to the total given in the quantity column. For pricing purposes only the amount in the quantity column is to be used.				
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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2

Contractor

Part C2: Pricing Data
Section C2.2 Schedule of Quantities



4.1.1 STATE OF THE PROPERTY OF	PEC-06- MOT 41-BCN- 00-DR-	ELECTRICAL WORK - LV INSTALLATION Note: All items to include for supply, design manufacture, delivery, installation, commissioning and maintenance as per specifications. Electrical Motors Supply and deliver electrical motors complete with pulleys, fan belts, wire guards, belt guards, brackets and required spacers in the			
.1.1 35341- ZZZ-00 ELC-3 TS-0 35341- ZZZ-00 ELC-3 TS-0	'MOT 41-BCN -00-DR- C-311-	Note: All items to include for supply, design manufacture, delivery, installation, commissioning and maintenance as per specifications. Electrical Motors Supply and deliver electrical motors complete with pulleys, fan belts, wire guards, belt guards, brackets and required spacers in the			
4.1.1 STATE OF THE PROPERTY OF	'MOT 41-BCN -00-DR- C-311-	manufacture, delivery, installation, commissioning and maintenance as per specifications. Electrical Motors Supply and deliver electrical motors complete with pulleys, fan belts, wire guards, belt guards, brackets and required spacers in the			
4.1.1 35341- 2ZZ-00 ELC-3 TS-0 4.1.2 35341- ZZZ-00 ELC-3 TS-0	'MOT 41-BCN -00-DR- C-311-	Supply and deliver electrical motors complete with pulleys, fan belts, wire guards, belt guards, brackets and required spacers in the			
4.1.2 35341- ZZZ-00 ELC-3 TS-0 ELC-3 TS-0	-00-DR- C-311-	with pulleys, fan belts, wire guards, belt guards, brackets and required spacers in the			
ZZZ-00 ELC-3 TS-0		following types:			
ZZZ-00 ELC-3 TS-0		Manufacturer: Actom			
ZZZ-00 ELC-3 TS-0		Three phase with VSD starting			
ZZZ-00 ELC-3 TS-0		a) 15 kW (Model:)	No.	2	
ZZZ-00 ELC-3 TS-0		b) 7.5 kW (Model:)	No.	3	
ZZZ-00 ELC-3 TS-0		c) 3 kW (Model:)	No.	3	
4.2 ELSPI	-00-DR- C-311-	Install and commission electrical motors complete with pulleys, fan belts,wire gaurds and required spacers in the following types:			
LVC		Three phase with VSD starting			
LVC		a) 15 kW (Model:)	No.	2	
LVC		b) 7.5 kW (Model:)	No.	3	
LVC		c) 3 kW (Model:)	No.	3	
		Low Voltage Cable Installation			
ZZZ-00	11-BCN 00-DR- C-311-	Supply and install the following 600/1000V PVC insulated PVC bedded SWA PVC sheathed stranded copper cables in trenches, sleeves and cable trays and deliver to site (excavations, sleeves, cable trays and terminations measured elsewhere):			
		a) 50 mm² x 4 core PVCSWA CU LV	m	20	
		b) 25 mm² x 4 core PVCSWA CU LV	m	50	
Carried		ırd	1		

Witness 2

Witness 1



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	rard				
		c) 10 mm² x 4 core PVCSWA CU LV	m	300		
		d) 6 mm² x 4 core PVCSWA CU LV	m	100		
		e) 6 mm² x 3 core PVCSWA CU LV	m	60		
4.2.2	ZZZ-00-DR-	Cable termination complete, including glands, shrouds, lugs etc. fully supplied, installed and connected:				
	13-001	a) 50 mm² x 4 core PVCSWA CU LV	ea	2		
		b) 25 mm² x 4 core PVCSWA CU LV	ea	4		
		c) 10 mm² x 4 core PVCSWA CU LV	ea	24		
		d) 6 mm ² x 4 core PVCSWA CU LV	ea	8		
		e) 6 mm² x 3 core PVCSWA CU LV	ea	4		
4.2.3	ZZZ-00-DR-	Earth conductors: a) The supply and installation of bare stranded copper conductors installed in the same route as the cables:				
		i) 50 mm²	m	20		
		ii) 25 mm²	m	500		
		iii) 10 mm²	m	300		
		iv) 6 mm²	m	100		
		 Bare copper earth termination complete, including glands, shrouds, lugs etc. fully supplied, installed and connected: 				
		i) 50 mm²	ea	2		
		ii) 25 mm²	ea	4		
		iii) 10 mm²	ea	24		
		iv) 6 mm²	ea	12		
	Carried forwa	rd				

Contractor	 Witness 1	Witness 2	,	Employer	1	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
4.2.4	35341-BCN ZZZ-00-DR-					
		Supply and install the following HDPE corrugated flexible sleeves in trenches with a maximum depth not to exceed 1m:				
		NEXTUBE TYPE (bends and excavation measured elsewhere)				
		i) 110mm dia.	m	50		
		ii) 50mm dia.	m	50		
4.2.5	35341-BCN ZZZ-00-DR- ELC-311-	Excavations, Imported Material and Backfilling:				
	TS-001	The contractor to supply all equipment and carry out all tasks to excavate, import material, compaction etc as necessary as per drawings and specifications.				
		Excavation in earth not exceeding 2m deep including risk of collapse of excavations, keeping excavations free from water, setting aside excavated material and later refilling.				
		LV cable trenches 750 x 400mm				
		a) Soft Excavation (for classification refer to SANS 1200D: Earthworks, paragraph 3.1)	m³	85		
		b) Intermediate Excavation (for classification refer to SABS 1200D: Earthworks, paragraph 3.1)	m³	25		
		c) Hard rock Excavation (for classification refer to SABS 1200D: Earthworks, paragraph 3.1)	m³	25		
		d) Supply, import and install a sand bedding/blanket from fine river sand in trench - 300mm deep (150mm above and 150mm below the cable)	m²	35		
	Carried forwa	ırd				

Contractor	Witness 1	Witness 2	,	Emplover	Witness 1	Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard				
		e) Backfilling of trenches with excavated soil after cables have been laid and tested complete with compacting of backfilling, leveling-off of trenches and removing, carting away and dumping of surplus excavated material	m³	25		
		f) backfilling material to consist of Soilcrete ratio of 1:12	m³	25		
		g) Supply and Install danger tape	m	300		
4.3	ELSPEC- LVDBMCC	Distribution Boards and Motor Control Centres				
		The board must be priced seperately from the equipment listed below, if tenderers price the boards as only one item, tenderers will not be evaluated.				
4.3.1	ZZZ-00-DR-	Supply and install the following new 1.6mm Stainless steel distribution boards/ Motor Control Centres complete with sheet metal back tray, front panel, face plate with panel key catch at the tops, doors with metal-t hinges, padlockable lever lock handles, equipment rails, terminations plates, name plate holders on face plate, busbars, non removeable laminated legend card and prepare for and including all internal wiring for the equipment listed below plus 30% spare space. Colours of the different sections must be: Normal-Orange, Emergency-red, Uninteruptable Power-violet.				
		Shop drawings to be approved before ordering.				
		a) Plinth mounted Kiosk A	No.	1		
		i) 150A 4P 15kA Manual Change over isolator	No.	1		
		ii) PM2210 Easylogic power meter complete with 150/5A CT's and Voltage Fuses and bays	No.	1		
		iii) 63A 3P 6kA MCB-CBI	No.	2		
	Carried forwa	rd				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



TEM NO	PAYMENT REFERS TO			DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT	
	Brought forw	vard	ard						
			iv)	32A 2P 6kA MCB-CBI	No.	2			
			v)	32A 3P 6kA MCB-CBI	No.	1			
			vi)	32A 3P 6kA Contactor 230V coil - CBI	No.	1			
			vii)	16A Kiosk mounted Day Night switch	No.	1			
			viii)	TYPE 1+2 CIPROTEC S/A PSC4-12.5 / 400 TT 3PH+N S/A	No.	1			
			ix)	Panel mount indicator lights complete with 6A fuses & fuse bays	No.	3			
		b)		essed mounted Sub DB - ardhouse	No.	1			
			i)	63A 2P 6kA MCB - CBI	No.	1			
			ii)	10A 1P 6kA MCB - CBI	No.	2			
			iii)	63A 1P+N 6kA Earth Leakage - CBI	No.	1			
			iv)	20A 1P 6kA MCB-CBI	No.	3			
			v)	TYPE 1+2 CIPROTEC S/A PSC4-12.5 / 400 TT 3PH+N S/A	No.	1			
			vi)	Panel mount indicator lights complete with 6A fuses & fuse bays	No.	1			
		c)	Rec She	essed mounted Sub DB - d	No.	1			
			i)	63A 2P 6kA MCB - CBI	No.	1			
			ii)	10A 1P 6kA MCB - CBI	No.	2			
			iii)	63A 1P+N 6kA Earth Leakage - CBI	No.	1			
			iv)	20A 1P 6kA MCB-CBI	No.	3			
			v)	TYPE 1+2 CIPROTEC S/A PSC4-12.5 / 400 TT 3PH+N S/A	No.	1			
	Carried forwa	rd							

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	Witness 1	\\/itnaca 2			Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT						
	Brought forw	Brought forward											
		,	vi) Panel mount indicator lights complete with 6A fuses & fuse bays	No.	1								
		١	PUMPSTATION 2 MCC - Surface mounted/Weatherproof MCC's complete with the following equipment mounted and operational:	No.	1								
		i	63A 3PH 6kA isolator with door mount handle and extension shaft	No.	1								
		i	ii) 18kW 3PH 6kA motor protection circuit breaker with Aux 1x N/O contacts and 1x N/C contacts - SM1R3200 18kW motor protection circuit breaker CW SM1X1211 clip on 1 NO 1 NC aux contact CW 1 x SM1X18200R panel mount door rotary handle with shaft	No.	2								
		i	iii) 18,5kW 3PH Variable Speed Drive Delta C2000-120.5KW VFD three phase VFD110C4EA-21	No.	2								
		i	iv) 10A 3P 6kA MCB-CBI	No.	1								
		,	v) 10A 2P 6kA MCB-CBI	No.	1								
		,	vi) 2A 24VDC DVPPS02 power supply	No.	1								
		,	vii) 63A 1P+N 30mA Earth leakage 6kA - CBI	No.	1								
		,	viii) 10A 1P 6kA MCB-CBI	No.	1								
		i	x) 20A 1P 6kA MCB-CBI	No.	1								
			TYPE 1+2 CIPROTEC S/A PSC4-12.5 / 400 TT 3PH+N S/A	No.	1								
		;	xi) 60/5A CL1 CT'S-ASK31.3 7039 60/A CL1 current transformers	No.	5								
			xii) 0-60A max demand ammeters - 96 X 96 ERBC05A9/63 max demand ammeter with selector switch	No.	2								
	Carried forwa	rd		1									

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	Witness 1	\\/itnaca 2			Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT			
	Brought forw	ward								
		xiii)	96 X 96 BEHCA/9 running hour meter	No.	2					
		xiv)	6A fuses and holders - 420006 10 x 35mm gG 6A fuses and 6 X 485101 32A 10 X 38mm PMX fuse holders	No.	10					
		xv)	Panel mount indicator LED lights - 22mm dia AD22-22VM pilot lights (red, yellow, blue)	No.	9					
		xvi)	PM2210 Easylogic power meter	No.	1					
		xvii)	EE3RMH1 ESTOP complete with LPX AU113 label ring	No.	2					
		xviii)	AS218RX-A 8DI / 6DO / 2AI / 2AO DELTA PLC	No.	1					
		xix)	AS-PS02 DELTA power supply	No.	1					
		xx)	DELTA industrial ethernet hub	No.	1					
		xxi)	DELTA DOP 107 7-inch touch HMI with SD and USB and 3 comms ports	No.	1					
		xxii)	Auto/off/manual spring return selector switch complete - LPC S233	No.	2					
		xxiii	Copper busbars, wiring ducting, labelling and terminations, all included	No.	1					
		xxiv	Programming of PLC and on site commissioning	No.	1					
		moi with and	MPSTATION 1 MCC - Surface unted/Weatherproof MCC's complete the following equipment mounted operational:	No.	1					
		i)	63A 3PH 6kA isolator with door mount handle and extension shaft	No.	1					
	Carried forwar	.d								

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



Section C	C2.2 Schedule	of Quantit	ies .				ALON IOSTOR
ITEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	ard/					
		ii)	11kW 3PH 6kA motor protection circuit breaker with Aux 1x N/O contacts and 1x N/C contacts - SM1R3200 18kW motor protection circuit breaker CW SM1X1211 clip on 1 NO 1 NC aux contact CW 1 x SM1X18200R panel mount door rotary handle with shaft	No.	3		
		iii)	5.5kW 3PH 6kA motor protection circuit breaker with Aux 1x N/O contacts and 1x N/C contacts - SM1R3200 18kW motor protection circuit breaker CW SM1X1211 clip on 1 NO 1 NC aux contact CW 1 x SM1X18200R panel mount door rotary handle with shaft	No.	3		
		iv)	3kW 3PH 6kA motor protection circuit breaker with Aux 1x N/O contacts and 1x N/C contacts - SM1R3200 18kW motor protection circuit breaker CW SM1X1211 clip on 1 NO 1 NC aux contact CW 1 x SM1X18200R panel mount door rotary handle with shaft	No.	3		
		v)	11kW 3PH Variable Speed Drive Delta C2000- three phase VFD	No.	3		
		vi)	5.5kW 3PH Variable Speed Drive Delta C2000- three phase VFD	No.	1		
		vii)	5kW 3PH Variable Speed Drive Delta C2000- three phase VFD	No.	2		
		vii)	10A 3P 6kA MCB-CBI	No.	1		
		viii)	10A 2P 6kA MCB-CBI	No.	1		
		ix)	2A 24VDC DVPPS02 power supply	No.	1		
		x)	63A 1P+N 30mA Earth leakage 6kA - CBI	No.	1		
	Carried forwa	rd					

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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ΓΕΜ NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUN
	Brought forwa	rd					
		xi)	10A 1P 6kA MCB-CBI	No.	1		
		xii)	20A 1P 6kA MCB-CBI	No.	1		
		xiii)	TYPE 1+2 CIPROTEC S/A PSC4-12.5 / 400 TT 3PH+N S/A	No.	1		
		xiv)	60/5A CL1 CT'S-ASK31.3 7039 60/A CL1 current transformers	No.	9		
		xv)	0-60A max demand ammeters - 96 X 96 ERBC05A9/63 max demand ammeter with selector switch	No.	6		
		xvi)	96 X 96 BEHCA/9 running hour meter	No.	6		
		xvii)	6A fuses and holders - 420006 10 x 35mm gG 6A fuses and 6 X 485101 32A 10 X 38mm PMX fuse holders	No.	10		
		xviii)	Panel mount indicator LED lights - 22mm dia AD22-22VM pilot lights (red, yellow, blue)	No.	15		
		xix)	PM2210 Easylogic power meter	No.	1		
		xx)	EE3RMH1 ESTOP complete with LPX AU113 label ring	No.	6		
		xxi)	AS218RX-A 8DI / 6DO / 2AI / 2AO DELTA PLC	No.	1		
		xxii)	AS-PS02 DELTA power supply	No.	1		
		xxiii)	DELTA industrial ethernet hub	No.	1		
		xxiv)	DELTA DOP 107 7-inch touch HMI with SD and USB and 3 comms ports	No.	1		
		xxv)	Auto/off/manual spring return selector switch complete - LPC S233	No.	6		
		xxvi)	Copper busbars, wiring ducting, labelling and terminations, all included	No.	1		

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	Witness 1	\\/itnaca 2			Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
		xxvii) Programming of PLC and on site commissioning	No.	1		
		f) Locks:				
		i) Supply and installation of No. 2 locks	No.	5		
4.4		Lighting and Small Power Light Fittings				
4.4.1	ZZZ-00-DR- ELC-311-	Supply and install the following light fittings as per schedule type (samples of light fittings must be approved by the engineer):				
	TS-003	a) Type A-24W 5FT weatherproof channel LED similar to Synerji	No.	8		
		b) Type B-15W Weatherproof bulkheadd LED Similar to Beka Series 30	No.	17		
		c) Type C-40W streetlight LED luminaire similar to Genlux SL1	No.	12		
		d) 6m Mounting height pole, planted type, complete with brackets for type C luminaire mounting, complete with 5A 1P 6KA MCB etc. similar to Beka GRP pole including single spigot	No.	12		
4.5		Small Power Points				
4.5.1	ZZZ-00-DR- ELC-311-	Supply and install the following equipment necessary to leave in a working order as per specification of all electrical outlets:				
	TS-002	Contractors to allow for all off-cutts, screws, couplings, bushes, etc. not measured.				
		a) Light Switches:				
		Switch complete with cover plate (surround) fixed onto flush or surface mounted outlet box.				
		i) 16A rotary weatherproof light switch	No.	5		
		ii) 16A Day night switch mounted inside clear lid outlet box	No.	5		
	Carried forwa	I ird				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



TEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	Brought forward					
		b)	Switched Socket Outlets:				
			Switched socket outlets etc. complete with cover plate(surround) fixed onto flush or surface mounted outlet box.				
			i) Wall mount combo type A: Crabtree range outlets: 1 X 16A SSO normal white + SW, 2 X 16A SANS 164-2 normal white + SW white mounted inside PSO2 stealth IP65 box complete	No.	9		
			ii) Surface mount Industrial Appliance Inlet: 63A 3P+N+E IP66 complete with protection Cap. Wired to MCC Change over via 2m x 16mm SQ 4C+E conductors	No.	1		
		c)	Isolators and Power Outlets:				
			Isolator outlets etc. complete with cover plate (surround) fixed onto flush or surface mounted outlet box.				
			i) 60A Triple pole three phase, complete with PS02 stealth box	No.	10		
		d)	Cable Trays and Wiring Ducting:				
			Steel wiring channel complete with cover plates, fixing to structure or fixed to walls or concrete surfaces to include suspension rods etc. to make complete.				
			i) 150mm wide wire mesh cable tray heavy duty	m	50		
			ii) Horizontal elbow	No.	5		
			iii) T-pieces	No.	5		
			iv) Crossovers	No.	5		
			v) internal/external riser and drop	No.	5		
			vi) wall mounting P2000 channels (200mm)	No.	50		
	Carried forwa	rd					

Contractor	Witness 1	Witness 2		Emplover	Witness 1	Witness 2



TEM NO	PAYMENT REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard					
		e)	Conduit:				
			Conduit placed in position for casting into concrete slabs, surface beds, screeds, for building into brickwork, surface mounted on brick walls and fixed in ceiling voids and dry wall partitioning.				
			i) 20mm diameter Galvanised	m	100		
			ii) 25mm diameter Galvanised	m	100		
		f)	Conduit Boxes and Fittings:				
			Placed in position for casting into concrete, building or chased into brickwork, flush or surface mounted.				
			i) Back/side entry 50mm round outlet box (average 1 to 4 way)	No.	25		
			ii) 100x50x50mm wall outlet box	No.	5		
			iii) 100x100x50mm wall outlet box	No.	8		
			iv) 100x100x50mm Extension box	No.	8		
		g)	PVC Insulated Conductors:				
			PVC insulated stranded copper conductors drawn into conduits or wire ways etc.				
			i) 2.5 mm ² Red & Black	m	200		
			ii) 4 mm² Red & Black	m	200		
		h)	Bare Copper Earth Conductors:				
			Bare stranded copper earth conductors drawn into conduit or wire ways.				
			i) 2.5 mm ²	m	100		
			ii) 4 mm²	m	100		
	Carried forwa	rd					

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	Witness 1	\\/itnaca 2			Witness 1		Witness 2



TEM NO	PAYMENT REFERS TO			DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	varc	t					
		i)	Bon	ding and Earthing:				
				contractors shall supply and install following complete:				
			i)	Bonding of all pipework via 6mm Earth cable from the earthing busbar to the pipework complete with terminations, lugs, screws etc.	No.	2		
			ii)	Supply and install Lightning protection earth electrode and down conductor points complete to obtain a earth resistance of less than 10hm	No.	8		
		j)	Ger	neral:				
			i)	Electrical spares per installation	No.	1		
			ii)	Operation and maintenance manuals including circuit diagrams (3 sets) per installation measured under Schedule 8	No.	1		
			iii)	All items and labour necessary to complete test and commission the complete electrical installation including the issuing of all relevant test certificates and the certificate of compliance	No.	1		
		k)	Tes	ting:				
			i)	Allow for testing and commisioning of complete electrical installation and issueing of Certificate Of Compliance (COC) by an accredited person in terms of the newest electrical act for each distribution				
				board	No.	1		
			ii)	Allow for full commissioning per installation	No.	1		
	Carried forwa	ırd						

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	Witness 1	\\/itnaca 2			Witness 1		Witness 2



NO	REFERS TO		DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard					
4.6	ELSPEC- LVCI	Contr	ol Equipment and Instrumentation				
4.6.1	35341-BCN- ZZZ-00-DR-	and co	ontractor is to supply, deliver, install ommission the following Control ment and Instrumentation:				
	13-002	a) P	ressure Switch/Sensors:				
		i)	HUBA TYPE 528 0-16BAR 4-20mA IP67 transmitter sensor	No.	2		
		b) Fl	ow Switch/Sensors:				
		i)	Type Wika FSD4 with contract and 4-20mA output complete with M12 connection cables etc. flow switch	No.	2		
		c) Le	evel Transmitter Sumps:				
		i)	EM 10-30VDC 600mm-8000mm ultrasonic level sensor complete with 4-20mA, PNP, N/O, N/C output with M12 plug and cable and mounting bracket similar to M30 UT5L/G6-1ESY	No.	2		
		d) To	ermination, Cable and Wiring Numbers:				
		i)	Allow under this item for wire, cable and termination numbering not allowed for elsewhere per MCC	No.	1		
		e) D	rawings:				
		i)	Work drawings of all MCC's and equipment for approval by the Engineer	-	-	Sum	
		ii)	The supply of As-build drawings in electronic format (Autocad) DXF files, amount is per installation	-	-	Sum	
	Carried forwa	rd		•			

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
4.7		Electric Fencing				
		NOTE: The Contractor that must install the electric fencing shall be registered at department of labour and shall be a specialist contractor.				
4.7.1		Supply of JVA Z14 Fence energizer with backup battery, plug in power supply, sherlotronics 1CH receiver and 2 remotes (to be handed over to client), alarm indication surface mounted strobe light and siren, in a outdoor weatherproof wall mounted steel cabinet, manufactured from 1,6mm 3CR12 stainless steel, complete with doors with metal-t hinges, padlockable lever lock handles, equipment rails, terminations plates, name plate holders on face plate, busbars, non-removeable laminated legend card and prepare for and including all internal wiring for the equipment-cabinet to be approved by Engineer		-	Sum	
1.7.2		Installation of complete cabinet with energizer as per item 4.7.2 above	-	-	Sum	
4.7.3		Supply, delivery, installation and testing of 6 Strand electrical fence with 2,24mm high strain galvanised wires installed on top of the existing concretge palisade fence, complete with mounting plates, corner strains, intermediate insulators, tensioner insulators, gate contacts, earth spikes spaced as per SANS, danger boards, indicator on light, etc. to be in working order complete with earthloops mounted between each intermediate pole between all live and earth wires				
1.7.4		(plan length) Supply, delivery, installation and testing of 6 strand piggyback electrical fencing on top of exising entrance gates complete with all	m	240		
		insulators, gate contacts, danger boards, etc. to be in working order.	No.	2		
	Carried forwa	rd				

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forv	vard				
4.7.5		Supply, delivery, installation and testing of HT leads from energizer to electrical fence, complete in conduit estimated 10m from energizer to fence.	-	1	Sum	
4.7.6		Supply, delivery, installation and testing of Electric fence red alarm strobe light, mounted to the building in a visible location	No.	1		
4.8		Pepper Spray Alarm Panel				
4.8.1		The Contractor is to supply and install a pepper spray alarm panel inside the pump station complete:				
		a) Surface mounted Skunk pepper spray master alarm panel with battery backup, 2 x PIR sensors, door magnet, sound bomb, receiver and 2 x remotes, power supply and led surface mounted indicator light outside building. Unit complete with wiring to siren and Led indicator light, spare pepper spray canister, etc. to be in working order		-	Sum	
4.9		GSM Remote Relays				
4.9.1		The Contractor is to supply and install a GSM / LTE alarm and fence remote alarm system:				
		a) GSM commander LITE GC-0321, complete with plug in power supply mounted inside electric fence energizer DB. The commander to monitor the electric fence active/non-active, and alarm outputs as well as the Skunk spray active / non-active and alarm outputs and a message to be sent to the municipality				
		when alarms are activated	-	-	Sum	
		b) 4G LTE wifi router 50Mb/150Mb with ethernet ports	-	-	Sum	
	Carried forwa	rd.				
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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
	Brought forw	vard				
4.10		Sundries				
4.10.1		Allow for testing and commisioning of complete electric fence system and providing a COC	-	-	Sum	
4.10.2		Provision for as built drawings, manuals and operative training	-	-	Sum	
4.10.3		Allow for registered data sim cards to be installed in router and GSM Commanders preloaded with R 1000,00 vouchers for communications	_	-	Sum	
	TOTAL OF	SECTION 4 CARRIED TO SUMMARY				

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Contractor	Witness 1		Witness 2		Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
5 5.1	Part. Spec. PB	SECTION 5: TOP STRUCTURES Construction of Toilet Top Structure and Installation of Sewer Connection, as per dwg. No. 35341-BCN-ZZZ-00-DR-CIV-133-TS-005.				
		Build a new toilet structure, complete with groundworks, concrete floor, brickwork, door, corrugated iron roofing, and painting of door. All materials and labour included				
		Supply and install Vaal Sanitary Ware suite, consisting of a vitreous china 90 degree out wash-down pan and matching 6-liter SISO polypropylene top-flush cistern, complete with lid, fitment, and flush pipe or similar approved				
		Supply and install fibre-cement wash trough with pedestal, including all fittings and labour required				
		Supply and install water and plumbing connections to toilet and wash trough, including all fittings and labour required.	No.	250		
5.2		Erf connections to main sewer pipeline:				
	SANS 1200 DB	a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material:				
	8.3.2	i) Trench excavation in earth not exceeding 2m deep	m³	4500		
	SANS 1200 LD 8.2.1	b) Supply, lay, joint, bed, test and backfill uPVC "Durodrain" or similar approved solid wall HD class 34 pipeline:				
		i) 110mm dia.	m	3000		
	SANS	c) Supply only of bedding by importation:				
	1200 LB 8.2.2	i) From commercial sources	m³	1200		
	PSLD 8.2.11	d) Connection to existing sewer	No.	250		
	Carried forw	ard				

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Contractor	Witness 1		Witness 2	Employer		Witness 1		Witness 2



ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT			
	Brought forward								
5.3	SANS 1200L	Extra-Over Item 5.2 (b) for Specials:							
	8.2.2	 a) Rodding eye (complete with fire hydrant box) using: 							
		i) uPVC "Durodrain" or similar approved Solid Wall HD Class 34	No.	350					
		b) 110ø plain 45 deg junction using:							
		i) uPVC "Durodrain" or similar approved Solid Wall HD Class 34	No.	250					
5.4	PSC 8.2.11	Take down existing fences and re-erect to original state	m	1250					
5.5	SANS 1200LF	Erf connections to main water pipeline:							
	8.2.1	a) Install erf connections complete as per dwg 35341-BCN-ZZZ-00-DR-CIV-133-TS-008:]. 						
		i) Long double connection	No.	21					
		ii) Long single connection	No.	84					
		i) Short double connection	No.	21					
		ii) Short single connection	No.	83					
	8.2.2	b) Supply, lay and test connections from the water meter box to the top structure:							
		i) 20mm HDPE PN10	m	5 000					
	8.2.4	c) Supply and install water meter units complete with couplings and meter boxes:							
		 i) 20mm Water Management Device (WMD) - Diehl Corona MCI Composit 108 Water Meter with Izar Pulse I Emitter, or similar approved 	e No.	251					
		Emitter, or similar approved	INO.	201					
	TOTAL OF	SECTION 5 CARRIED TO SUMMARY		<u> </u>					
	I O I AL OI	SECTION O CANTILLE TO COMMINATE							

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Contractor	Witness 1	Witness 2	Employer		Witness 1		Witness 2



NALA LOCAL MUNICIPALITY CONTRACT NO.

NLM/TS/004/2025-26

THE REFURBISHMENT OF SEWER PUMP STATION AND ERADICATION OF 250 BUCKETS IN EXT. 12 & 13 IN WESSELSBRON

SECTION C2.3

SUMMARY OF SCHEDULES

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Part C2: Pricing Data

Section C2.3 Summary of Schedules



SCHEDULE OF QUANTITIES SECTION 1 SECTION 2 SECTION 3 SECTION 4 SECTION 5 TOP STRUCTURES R R **TOTAL OF SCHEDULE OF QUANTITIES** R **CALCULATION OF TENDER SUM CONTINGENCIES (10%)** The Sum provided here is under the sole control of the Principal Agent and may be VALUE-ADDED TAX (VAT) **TOTAL TENDER SUM** R



NALA LOCAL MUNICIPALITY CONTRACT NO.

NLM/TS/004/2025-26

THE REFURBISHMENT OF SEWER PUMP STATION AND ERADICATION OF 250 BUCKETS IN EXT. 12 & 13 IN WESSELSBRON

SECTION C2.4

BANKING DETAILS

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2



NALA LOCAL MUNICIPALITY

CONTRACT NO.

NLM/TS/004/2025-26

THE REFURBISHMENT OF SEWER PUMP STATION AND ERADICATION OF 250 BUCKETS IN EXT. 12 & 13 IN WESSELSBRON

FINANCIAL REFERENCES

(a) BANK RATING

- 1. It is requisite that a bank rating be obtained, bearing an original stamp by the relevant bank.
- 2. Failure to complete the bank rating Form overleaf may invalidate the tender rating should be based on the highest contract value tendered for and the corresponding timeframe.

(b) FINANCIAL STATEMENTS

I/We agree, if required, to furnish an audited copy of the latest set of financial statements together with my/our Directors' and Auditors' report for consideration by the Employer.

(c) DETAILS OF COMPANY'S BANK

I/We hereby authorize the Employer/Engineer to approach all or any of the following banks for a reference:

DESCRIPTION OF	BANK DETAIL	BANK DETAIL				
BANK DETAIL	APPLICABLE TO	APPLICABLE TO THE				
	COMPANY HEAD OFFICE	SITE OF THE WORKS				
Name of bank						
Branch name						
Branch Code						
Street Address						
Name of manager						
Telephone number	()	()				
Account number						
Bank Rating						

Contractor	Witness 1	Witness 2	•	Employer	Witness 1	Witness 2

Contract NLM/TS/004/2025-26 Part C3: Scope of Work



SIGNATURE OF TENDERER:	 DATE:
financially able to complete a contract to the duration, or such other duration as the Tend	icient good standing with this bank that he will, in my opinion, b value as entered, by the Tenderer, in Form C1.1 over the specifie derer may offer. In addition, we confirm that, for the amount of th
enquiry, the Tenderer is rated Code	
SIGNATURE OF BANK MANAGER:	DATE:
Place bank stamp here	
Contractor Witness 1 Witne	ess 2 Employer Witness 1 Witness 2