



YOU ARE HEREBY INVITED TO QUOTE

BRIEFING SESSION DATE: N/A

CLOSING DATE: **05th February 2024**

CLOSING TIME: 16H00

NAME OF SERVICE PROVIDER:

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Project Title : PALISADE SECURITY FENCE & LIGHT SYSTEM AT FLAG BOSHILO SCHEM

LNW Contract Number : RFQ 22/01

Services Required : SECURITY FENCE AND LIGHT SYSTEM

Revision : 00

Date of Issue : 25th January 2024

Closing Date : **05th February 2024 at 16H00**

Project Location : Flag Boshielo Scheme (Ps 2,4, 9 & 10)

Enquiries - Technical : Mr. Harry Malatji – email: harrym@lepellex.co.za

Enquiries - SCM : Mr. Robert Ngobeni– email: robertn@lepellex.co.za

PROJECT NAME: SECURITY FENCING AND LIGHTING AT FLAG BOSHILO

1. BACKGROUND

Flag Boshielo water treatment works is a water treatment facility which is operated by Lepelle Northern Water on behalf of Sekhukhune District Municipality, and it supplies water to several villages across three local municipalities.

There are various pump stations that are scattered around the plant's area of supply for lifting potable water from a lower service zone to a higher zone which require security upgrade in the form of perimeter fence and lights to mitigate theft and vandalism as well as to enable operation by employees at night.

2. SPECIFICATION

Bids are hereby invited from qualified contractors with experience and knowledge of the work security fencing. **Bidders must have CIDB grading of 2 SQ or higher.**

2.1 MANDATORY REQUIREMENTS:

- a) **CSD - (Central Supplier Database Registration) Documents Tax Verified.**
- b) **CV of Project Manager with qualification in the built Environment – NQF level 6 or higher.**
- c) **Detailed Method Statement and Work plan** - The quote must be accompanied by a detailed method statement which shows understanding of the work to be carried out.
- d) **Completed pricing schedule.**

2.2 SUBMISSION OF QUOTATION

Service providers shall return the duly completed quotations and the required attachments no later than **16H00 on MONDAY 05th February 2024** to robertn@lepelle.co.za or to LNW Head Office by hand - office address 1 Landros Mare Street Polokwane 0700.

2.3 ADMINISTRATIVE COMPLIANCE

These documents shall be required only from the preferred bidder. Failure to submit within 48 hours of confirmed acknowledgment of receipt shall lead to disqualification. LNW shall consider the next preferred bidder who qualifies.

- a) Attached proof of Company or Shareholders Municipal Rates or Lease agreement with statement or a dated stamped letter from tribal authority. (Proof not more than three months old from advert date)
- b) Certified ID copies for key personnel (Project Manager/Supervisor) less than 3 months, this may be verified.
- c) Certified ID copies of the company shareholders less than 3 months
- d) Complete all SBD forms.
- e) Letter of Good standing, COIDA – Professional Engineering Services
- f) Company registration documents
- g) SARS Tax Compliance
- h) Bidder shall be dis-qualified if found to be in the list of restricted suppliers with the National Treasury.

2.4 SCOPE OF WORK

The scope covers the installation of concrete palisade fence at two pumps station and security lighting at four pump stations.

The project shall include installation of concrete palisade fence at PS4 and security lighting at Pump stations 2, 4, 8 and 9 and 10.

2.4.1 Palisade Fence

The palisade fence scope of works shall be executed in accordance with SANS 1200GE- Precast Concrete (Structural) and other related specifications. The works include among others the following:

- Site Establishment and de-establishment
- Removal of existing fence
- Clearing and grubbing up to 2m along the fence perimeter
- Excavations through all materials for palisade posts
- Concrete works for all posts, the required concrete strength is a minimum of 15MPa
- Supply and installation of 2,4m high precast concrete palisade fence
- Supply and erection of 500mm flat wrap 2mm galvanized razor wire around the fence perimeter
- Supply and erection of high-quality industrial steel sliding gate complete with lockset (6m x 2.4 high)

The palisade fence shall meet the following specifications or better:

- Pales must be at least 100mm wide on the inner facing surface with an outer surface of at least 80mm and a depth of 70mm.
- The Posts shall be at least 150mm wide on the inner facing surface with an outer surface of at least 80mm and a depth of 70mm.
- The Posts should be spaced no more than 2m apart and be mounted into a Concrete foundation.
- There should be at least two rails/beams per post, which should be at least 75mm by 150mm with 10mm holes for mounting of the Pales. The rails must be grouted into posts.
- Bolts must be of **stainless-steel material** and sized as per manufacturer specifications.
- The foundation for each Post should be at least 500mm x 500mm and 600mm deep to ensure effective anchoring of the posts.

- The distance between Pales should be no more than 90mm apart.
- Detailed installation specifications to be submitted prior to commencement with the works for approval by the Client.
- Where applicable, SABS approved material must be used. Proof to be submitted prior installations.
- Barbed wire shall have a barb spacing of maximum 12,5 mm and shall comply with SANS standards. The wire shall be single strand 2.5 mm spring steel with class A galvanizing. All the coils must be securely tied to the extension arms with 1.6mm galvanized steel wire at each post. Each 700 mm circle of razor wire must be securely tied to the steel strand using 1.6 mm galvanized wire.

The fence will be implemented at two pump stations:

Pump Station	Height	Length
Ga-Mmela (4)	2.4m	200m

2.4.3 Security Lighting across the Pump Stations

The security lighting will cover 7 pump stations namely,

- Ps2- Makgatle village
- Ps4- Gammela (Bapeding) Village
- Ps8- Een Kantane Village
- Ps9-Motseleope (Moomane North)
- Ps10 Mabintwane Village

Scope of work

The electrical scope of work covers the supply, delivery, installation, testing and commissioning of the complete lighting system, including the Civil Foundation Works.

- Supply and install 7x 11,5M TL 10M MH Stepped Pole HDY cw access door, light brackets suitable for 2 luminaires and cable entry.
- Supply and install foundation bolts manufactured from special steel along with nuts, washers, anchor plate and template.

- Casting of suitable foundation with 15 MPa concrete for the pole light considering safe soil bearing capacity at the site.
- The lighting installations shall be suitable for a 230V 50 Hz supply of electricity.
- Supply and install LED Floodlight 400W SMD Modular High Mast luminaires IK10, IP65, 3000K/4000K/6000K.
- Electrical material inside Pole including CB's, cable and daynight switch
- Supply and install earthing system for pole light complete with 1.2m earth spikes and 4mm² Bare Copper Earth Wire.
- Excavation and backfilling trench 0.5m deep x 300mm wide.
- 4mm² 2 core PVC SWA copper cable and 4mm² Bare Copper Earth Wire installation complete with termination.
- Supply and install 15A 2P MCB (If required)
- The electrical works should be carried out according to SANS by a licensed electrical contractor.

Specifications

Design

- The poles shall be designed to carry the specified quantity of luminaires on top in strict accordance with SANS 10225 1991-1 Code of Practice for the Design and Construction of Lighting Masts.

Material And Corrosion Protection

- All parts of the pole light shall be hot dip galvanized to SANS 121 (ISO 1461) 2000-1 specifications and test certificates shall be provided.
- All materials used are Grade GW355J High Tensile to SANS 657-1
- No drilling, machining or welding shall be performed on the pole after galvanizing.

Electrical Connection to The Luminaires

- The trailing cable shall be firmly connected to the luminaire carriage. Suitable connectors of the CEE type or connectors meeting IP44 within DIN 40050 shall be provided.

- Distribution board to supply the 2 x 400W Floodlights shall be provided for mounting on the inside of the pole, containing: MCB's, cable and daynight switch
- All circuit breakers and isolators shall have a rupturing capacity of 5kA and shall bear the mark of the S.A.B.S. and shall be accessible through cut outs in the cover without having to remove the cover.
- The distribution board shall be fully wired and ready for connection to the incoming supply cables.

Foundation

- Each mast shall be supplied with foundation bolts and templates. The bolts shall be hot dip galvanised over their entire length in compliance with SANS (ISO 1461) 2000-1. Two galvanised nuts, two washers and one spring washer shall be supplied for each bolt. The number of foundation bolts shall be determined according to the design
- Foundation plan, adequately designed, and based on a soil bearing capacity of 150kPa, giving details of the reinforcing required shall be submitted. Soil pressure and overturning safety factor shall be stated.
- All reinforcing and foundation bolts shall have a minimum of 100mm concrete cover. The 28 days cube strength of the concrete shall be 25 MPa.
- All foundations shall have a circular flat base from which a square plinth shall rise to above the surrounding ground level.
- One PVC, Class B cable sleeves shall be provided from the centre of the top of the foundation plinth, through the concrete to a point below ground level on the side of the plinth.
- After casting of the foundation, the slab shall be covered by earth, properly compacted. The area around the plinth shall be brought to the original level and shall be left neat and tidy.

Earthing Of Poles

- Sectional Poles standard system consisting of 2 x 1.2m earth spikes, installed under foundation and connected to foundation bolts via 4mm² copper conductors with brass clamps.

C1.2 CONTRACT DATA

The General Conditions of Contract for Construction Works Third Edition (2015) published by the South African Institution of Civil Engineering, is applicable to this contract. Copies of these General Conditions of Contract may be obtained from the South African Institution of Civil Engineering:

Block 19, Thornhill Office Park
Bekker Street, Vorna Valley,
Midrand.
Private Bag X200, Halfway House. 1685
Tel: 011-805 5947
Fax: 011-805 5971

C1.2.1 Contract Specific Data.

The following contracts data are applicable to this contract:

REFERENCE TO:	CLAUSE.	DATA
Contractor.	1.1.1.9	To be appointed by Lepelle Northern Water
Defect liability Period	1.1.1.13	The defect liability period shall be 12 months .
Due Completion Date	1.1.1.14	The Works shall be completed within 90 calendar days as envisaged by the employer.
Employer.	1.1.1.15	Lepelle Northern Water
Employer's Agent	3.2.1	Lepelle Northern Water
Sub-Contracting	4.4	No Works of value more than 25% of contract amount may be sublet to non-HDI Sub-contractor if contract has been obtained with HDI points
Selection of subcontractors	4.4.1	N/A
Contract Cessions	5.1	N/A
Documentation Required Before Commencement with Works	5.3.1	<p>The Works are to be commenced within 90 calendar days of the Commencement Date. The documentation required before commencement with Works execution are:</p> <ul style="list-style-type: none">• A signed Agreement between the Employer and the Contractor for the Works to be completed by the Contractor in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act No.85 of 1993) and the Construction Regulations promulgated there under (Refer to Clause 4.3).• Health and Safety Plan• Proof of payment to the Employer, that the Contractor has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993 (Refer to Clause 4.3).

REFERENCE TO:	CLAUSE.	DATA
		<ul style="list-style-type: none"> Initial Program Clause 5.6 CVs and qualifications of key staff, and Contractor's project team organogram. Clause 8.6
Submission of documents required in clause 5.3.1	5.3.2	The time to submit the documentation required before commencement with the Works execution is 14 days.
Special Non-working days	5.8.1	The special non-working days are public holidays
Penalty for delay	5.13.1	a) 0.03% of the contract value per calendar day and part thereof.
Liability for Any Latent Defects	5.16.3	The latent defect period is 10 years.
Guarantee Sum	6.2.1/6.2.2	N/A
Contract Guarantee	6.2.3	N/A
Percentage Allowances	6.5.1.2.3	The percentage allowances shall be 10%.
Time for Completion	5.6.2.1	90 DAYS from date of site handover, including Special Non-working.
Contract Price Adjustment	6.8.2	N/A
Special Materials	6.8.3	There are no special materials in this contract.
Materials on Site	6.10.1.5	N/A
Retention Money	6.10.3	N/A
Limit of Retention	6.10.3	N/A
Retention Money Guarantee	6.10.5	N/A
Variations exceeding 15 per cent	6.11	As per Contract
Defects Liability Period	7.8.1	12 Months
Limit of indemnity	8.4.2	claims unlimited
Excepted Risks	8.3	N/A
Insurances	8.6.1	N/A
	8.6.1.1.2	N/A
	8.6.1.3	N/A
	8.6.1.5	N/A

REFERENCE TO:	CLAUSE.	DATA
Dispute Resolution	10.5.1, 10.5.3	The number of Adjudication Board Members to be appointed: one. Adjudication, Arbitration, and the Court will be acceptable dispute resolution mechanisms

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Signature

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Date

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Position

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Name of bidder

PS9 Palisade Fence & Lights 4,7,8 & 9

PRICING DATA

ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	Amount
1		<p>SCHEDULED ITEMS</p> <p>Preliminary & General</p> <p>Labour, Preliminary and Service Costs : Including but not limited to the following - Establishment, Mobilization of Staff and Equipment, Delivery of Materials, Hire of Plant and Equipment, Dealing with Water and Labour Cost relating. Works plan and method statements subject to approval by LNW.</p>				
		Compliance with Occupational Health & Safety Act (At 85 of 1993 and amendments)	Sum	1		0,00
		Preparation and Implementation of Health and Safety Plan during project implementation	Sum	1		0,00
	1200C	<p>Site Clearance</p> <p>Clear and Grub all vegetation to a width of 2m including trees and stumps up to 1m girth (Approval by the Engineer)</p>	m	200		0,00
	1200DA	<p>Earthworks (Restricted Excavations)</p> <p>Excavate for restricted foundations, footings and trenches in all materials and use for backfill or embankment or dispose</p> <p>Extra over ofr excavation in hard material</p>	m ³	15		0,00
	1200GA	Concrete (Small Works)	m ³	2		0,00
4.1.1	8.4.1	<p>15 Mpa Concrete foundations for Posts</p> <p>15Mpa concrete ground beams to prevent access from underneath the fence at selected locations</p>	m ³	9		0,00
	1200GE	<p>Precast Concrete Structural</p> <p>Supply, Delivery and installation of precast concrete Palisade Fence complete with all materials as per specifications. The proposed fencing and manufacturer must be approved by LNW prior to ordering & installations of materials.</p>	m	200		0,00
		Additional Security				

	Supply, Delivery & Installation of razor wire/barbed wire (2mmØ strain high tensile) on top of the Palisade fences as specified by the Engineer	m	200		0,00
	Installation of 2,4 m x 6m Steel Sliding gate with a razor wire/barbed wire on top.	no	1		0,00
	Rate for installation of Light system at pump stations 2,4, 9 & 10 as per the specifications	Sum	1		Rate Only
Sub-Total A					0,00
VAT (@15%)					0,00
Grand Total					0,00