

Office of the Chief Financial Officer

QUOTATIONS ARE HEREBY REQUESTED IN ACCORDANCE WITH THE SCM REGULATIONS SECTION 18 OF THE LOCAL GOVERNMENT MUNICIPAL FINANCE ACT 56 OF 2003, FOR THE PURCHASE OF ITEM/S THAT COULD BE ABOVE R30 000.00 UP TO A TRANSACTION VALUE OF R200 000, 00 (INCLUDING VAT).

SUPPLY, DELIVERY AND OFF LOADING OF TRAFFIC SIGNAL CONTROLLER AND OTHER TRAFFIC LIGHT MATERIAL

DATE OF ADVERTISEMENT	20 June 2017		
DATE OF CLOSING	28 June 2017 at 12h00		
COMPULSORY BRIEFING SESSION (IF APPLICABLE)	22 June 2017 @10h00 at Infrastructure Services Boardroom		
DETAILS OF BIDDER			
FULL NAME			
ADDRESS OF BIDDER			
ID NUMBER (SOLE PROPRIETOR) COMPANY OR CC NUMBER			
REGISTRATION NUMBER (PTY) LTD			
TAX REFERENCE NUMBER			
VAT REGISTRATION NUMBER (IF ANY)			
CONTACT PERSON			
ALTERNATIVE CONTACT PERSON			
TELEPHONE NUMBER			
CELL PHONE NUMBER			
FAX NUMBER			
CIDB NUMBER (IF ANY)			

Must be completed in full

QUOTATIONS MUST BE SUBMITTED IN SEALED ENVELOPES CLEARLY MARKED "**SUPPLY, DELIVERY AND OFF LOADING OF TRAFFIC SIGNAL CONTROLLER AND OTHER TRAFFIC LIGHT MATERIAL**" TO THE QUOTATION BOX SITUATED AT: RATES AND TAXES HALL (LESEDI OFFICES)

C/O LOUW AND HF VERWOERD STREET HEIDELBERG 1438

ALL ENQUIRIES SHOULD BE REFERRED TO JACQUELINE CHAUKE (016) 492 0240 OR MS SIBULELO NXATHI@ 016 492 0202 WITH REGARDS TO THE BIDDING PROCEDURE.

DEPARTMENT: INFRASTRUCTURE SERVICES

The following information must be submitted with the quotation, failure in submitting these documents will result in a quotation being disqualified:

- o Tax Pin- Municipality will verify
- o CSD Registration
- Forms listed below (MBD 2,MBD 4,MBD 6.1,MBD 8,MBD 9, Clearence Certificate for Water & Lights)
- o Latest Municipal Account
- o Letter of good standing

Bidders who did not submit an original or certified copy of their BBBEE Certificate will not be allocated preference points and will only be evaluated on price.

Evaluation Criteria: 80/20 Preference point system as presented in the Preferential Procurement Policy Framework Act no 5 of 2000, for this purpose MBD 2, MBD 4, MBD 6.1 MBD 8, MBD 9 and the Clearance certificate for water & lights can be downloaded on our website on the following link:

<u>www.lesedilm.gov.za/key/scm</u>. MBD forms should be scrutinized, completed and submitted together with your quotation. All objections and complaints must be lodge within 14 days and in writing to the municipal's manager's office.

<u>NB</u>: Bidders who are not registered on the Lesedi Local Municipality's database should make sure that they fill in the application form and submit it as part of their bids on a separate envelope.

ANNEXURE A: SCOPE OF SERVICES

LESEDI LOCAL MUNICIPALITY

SUPPLY, DELIVERY AND OFF LOADING OF TRAFFIC SIGNAL CONTROLLER AND OTHER TRAFFIC LIGHT MATERIAL CONTROLLER SPECIFICATION

1. GENERAL

The required traffic signal controllers shall be microprocessor based and shall be configurable to switch up to two vehicular phases with two pedestrian E.C.O phases. The units should also include an accurate real time clock to facilitate cableless linking. The controller shall be upgradeable to work within a GPRS linked remote monitoring system. *GPS clock correction must be fitted to all controllers*.

2. CONTROLLER CABINET

The unit shall be housed in a hot-dip galvanised, heavy gauge, steel cabinet. The cabinet shall be lockable using a custom, vandal-resistant lock. The cabinet must be galvanised and assembled, only after all cutting, punching and bending has been done, to eliminate corrosion on overlapping joints. Cabinets shall be pole-mounted and shall be supplied complete with pole-mounting straps. The cabinets shall be weather proof with knock-outs at all cable entry points.

3. POWER SUPPLY

The controller shall be designed to operate from a 230 volt 50 Hz power supply within a voltage range of -15% to +20% and a frequency range of 48 to 52 Hz. If the power supply is interrupted for 20 milliseconds or less, the controller shall continue normal operation. In the event of a power interruption greater than 20 milliseconds, the controller shall shut down and resume normal start up procedure when the power is restored.

4. LIGHTNING PROTECTION

The most effective lightning protection practically possible shall be fitted to the mains input, which includes surge arrestors as well as an indoor lightning arrestor on the live leg of the power supply. All inputs to the controller shall be optically isolated and inputs connected to interlinking cables shall be relay isolated. Output circuits shall all be opto-isolated from the signal switching triacs.

5. LOOP DETECTORS AND PEDESTRIAN INPUTS

The controller shall be fitted with a minimum of two loop detector jacks wired to suit single channel, self tuning loop detectors. Two input terminals shall also be provided to accommodate demand from (normally open) pedestrian pushbutton stations.

6. COMPONENT LABELLING AND DOCUMENTATION

All components shall be clearly labelled and a comprehensive manual showing schematic and layout diagrams of the controller shall be made available. Controllers which have been configured by the factory for specific intersections shall be supplied with the dedicated documentation to facilitate installation.

7. SIGNAL SWITCHING

Signal switching shall be solid state using a 16 Amp triac for each signal circuit. Individual triacs shall be easy to replace on site to facilitate maintenance. The standard software supplied with the controller shall be able to accommodate any of the following phase combinations:

- Two vehicular phases with two pedestrian E.C.O. phases.
- One vehicular phase with an independent pedestrian phase for mid-block pedestrian crossings.
- The controller shall also be configurable as a pelican pedestrian with flashing amber during the pedestrian clearance.

8. OPERATING MODES

The controller shall be designed to operate in any of the following modes:

- Fixed time operation.
- Semi vehicle actuated operation.
- Fully vehicle actuated operation.
- Fully vehicle actuated operation and, in absence of demand, rest on the last phase demanded or on main road green.
- Emergency flashing.
- Manual control operated by a police switch. Under manual control minimum green, amber and all red periods shall be pre-set to ensure safe operation.

9. SIGNAL SWITCHING PLANS

The standard controller software shall accommodate eight signal switching plans, each of which shall be independently configurable to switch any of the above operating modes. Plans shall be selected by the integral real time clock on a time of day, day of week basis or remotely from a central computer (server).

10.CO-ORDINATION OF CONTROLLERS

Traffic signal controllers must allow for co-ordination with other controllers in all of the following methods.

- By means of communicating with a central computer (server).
- By means of GPS clock correction.

11. REMOTE MONITORING AND MANAGEMENT

Traffic signal controllers must be **easily upgradable** to allow the controller to communicate with a central server. The communications shall be GPRS based and allow for **live** monitoring, SMS reporting and data uploads/downloads. Additional equipment required for communications include the following:

- An outstation transmission unit (OTU) complete with GPRS modem.
- A high-gain GPRS antenna (2.3 dB minimum) complete with vandal-proof housing.
- A battery backup, with charger, capable of maintaining communications for 48 hours.
- Ancillary equipment to read hardware data such as an open door, emergency flashing, power failure and circuit breaker status.

The OTU shall interface with the controller as well as communicate with the server via a cellular network (TCP/IP). The outstation hardware shall be responsible at all times for monitoring and reporting events as well as faults occurring at the traffic signal controller. Events and faults shall all be time and date stamped. The OTU shall also be responsible for controller co-ordination.

For security reasons the OTU must support SIM cards which are pin encoded.

12. CONFLICT MONITORS

The controller shall be fitted with dual, hard wired conflict monitors which switch the intersection to emergency flashing should a conflict situation arise either from an internal controller fault or from an external fault on the installation. During emergency flashing the vehicular signals must flash red with the pedestrian signals switched off. Resetting the controller to normal operation shall only be possible by manual intervention on site.

13. DELAYED PRESENCE

Time delays on presence loops shall be provided to prevent phases being called unnecessarily. The time delays shall be pre-set in the controller making the use of standard loop detectors possible to facilitate maintenance.

14. PROGRAMME STORAGE

Controller programmes shall be stored on non-volatile memory.

15. SOFTWARE AND PERIPHERAL DEVICES (OPTIONAL EXTRAS)

A computer software package on which the user can edit, transfer and store multiple programmes shall be available should LLM require it at a later stage.

16. TRAFFIC SIGNAL CONTROLLER SPARES

A full range of spare parts for repair of traffic signal controllers shall be made available by the manufacturer.

17. SUPPLY OF TRAFFIC SIGNAL POLES

Supply of Automotor or similar approved type base plate for high and cantilever poles. Supply of pole shall conform to the dimensions shown in the detail drawings and to the specifications in the South African Road Traffic Signs Manual, Volume 3. The rate shall include the supply of the pole and of the steel frame base plate. The pole must be ready for installation.

- Supply of standard height poles
- Supply of totem (high) poles
- Supply of cantilever poles

18. SUPPLY OF SIGNAL HEADS

The signal heads used shall in all cases be only approved supplied signal heads. These signal heads shall however confirm to all the Standards as set in SANS 1459 and in the South African Road Traffic Signs Manual. The layout and symbols of the different types of signal heads are shown in the detail drawings.

Each signal head item, as specified in the schedule of quantities, shall include all the elements which shall consist of:

- a) Reflectors
- b) Lampholders
- c) Lamps (LED type)
- d) Lenses
- e) Visors
- f) Modular background screens
- g) Cables and transformers

Item	Description	Unit Price per controller (Excl. Vat)	Max Delivery Period (Weeks)
1	Supply, delivery and offloading of four phase traffic signal controller		
2	Installation of four phase traffic signal controller		
3	Supply of standard height poles		
4	Supply of totem (high) poles		
5	Supply of cantilever poles		
6	2 Aspect signal head		
7	3 Aspect signal head		

Prices should include all costs

ISAAC RAMPEDI ACTING MUNICIPAL MANAGER DATE

BIDDER (SIGNATURE)

DATE