

(13) SPECIFICATION(S)

1. BACKGROUND

The Solid Waste Management Department are responsible for the operation and management of solid waste disposal facilities and other waste management facilities within the City of Cape Town's (CCT) municipal boundaries. The facilities make use of industrial weighbridges to measure the actual mass of incoming and outgoing loads for accounting and monitoring purposes.

In terms of the Legal Metrology Act (Act 9 of 2014) and the Legal Metrology Regulations dated 24 August 2018, the industrial weighbridges used for mass measurement at the facilities must be verified for accuracy using approved methods.

The service provider is required to conduct quarterly inspections, maintenance, verification and calibration of all weighbridges and measuring instruments used for the weighing of waste containers at Solid Waste Management Facilities in the City of Cape Town. It is critical that all weighbridges are properly maintained and calibrated at all times for commercial use at all facilities where disposal of waste takes place.

Due to the nature Solid Waste Management business, the weighbridges must be attended to in the shortest space of time. It is expected that the service provider have adequate resources to provide immediate response, within 4 hours, of call out to any facility.

In order to execute the works the service provider must have adequate experience and have suitably experienced and qualified personnel to service, inspect, repair, verify and calibrate industrial weighbridges. The service provider should also have a dedicated workshop to be used for repairs and storage of critical spares to keep the weighbridges in good working order. The City reserves the right to inspect workshop and spares at any given time during the contract period.

This tender seeks to appoint a professional service provider who is accredited in terms of the South African National Accreditation System (SANAS) as repair and verification laboratory and designated by the National Regulator for Compulsory Specifications (NRCS). To conduct verification and or repair work on mass measuring instruments to and have appropriate experience in the maintenance, calibration and verification of industrial weighbridges for a period of 36 months from date of commencement.

2. SCOPE OF WORK

The extent of services required for the tender are outlined below.

2.1. Section A: Routine Maintenance and Verification

2.1.1. Inspection and servicing of weighbridges

The service provider will need conduct quarterly inspections at all solid waste management facilities specified in the tender that have weighbridges. Each weighbridge must be verified and fit for use at all times. Each inspection must be accompanied by a report and job card before an invoice is paid.

The key activities may include the following as a minimum:

- Inspect for any visible obstructions;
- Removal of weighbridge plates where required to perform inspections;
- Replacing any loose, snapped or missing bolts;
- Fastening of any loose cables, connections, ducting,
- Remove any debris, sediment or any other material underneath and next to the weighbridge and at the load transmitting devices (load cells) to ensure free movement of weighbridge and to reduce issues with binding;
- Checking for any rust, cracks or visual buckling of structural components;
- Inspection of railings where it forms part of weighbridge structure, tighten and replace any loose bolts where required;
- Checking of the weighbridge indicator / display for accurate operation;

All prices tendered must include labour, consumable parts, transport, and must include a 6 months guarantee on all repairs done.

2.1.2. Verification and Calibration of weighbridges

All weighbridges must be verified and calibrated at all times. Verification and calibration of weighbridges must be performed every 2 years (Biennial) as prescribed by regulation. Should any repairs be done that requires additional verification and calibration, this will be done under separate item. Invoicing for verification and calibration can only be done with a valid verification and or calibration certificate.

The key activities may include the following as a minimum:

- Initial verification to verify status of weighbridge;
- The service provider must supply verification certificates and test reports for all verifications performed;
- The verification officer must be registered and accredited as a technical signatory in terms of Legal Metrology regulations and any other stipulations as per the National Regulator;
- The rate for verification or calibration must include all test weights, labour, plant, crane truck, transport or any other equipment required to perform calibration.

2.1.3. Inspection and servicing trolley / bogey weighing equipment

The service provider will need conduct quarterly inspections of load measuring equipment installed at trolley, bogey or compactor units used to measure the mass of containers at solid waste transfer stations. The measuring instruments must at all times be verified and fit for use. Each inspection must be accompanied by a report and job card before an invoice is paid.

The key activities may include the following as a minimum:

- Inspect for any visible obstructions;
- Fastening of any loose cables, connections, ducting;
- Clean and service trolley or bogey unit including removal of any debris, sediment or any other material at the load cells;
- Checking for any rust, cracks or visual buckling of structural components;
- Checking of the weight indicator at waste compactor control panel for accurate operation;

2.1.4. Verification and calibration of trolley / bogey weighing equipment

The service provider will need conduct verification and calibration of load measuring equipment installed at trolley, bogey or compactor units used to measure the mass of containers at solid waste transfer stations every 2 years (biennial) as prescribed by regulation. Invoicing for verification and calibration can only be done with a valid verification and or calibration certificate. The measuring instruments must at all times be verified and fit for use.

2.2. Section B: Adhoc Services

2.2.1. Call out Requests

When required the Employer may request the service provider to perform call outs when any issues are encountered with weighing instruments at any of the CCT facilities.

The periods may be during normal working hours; 07h30 – 16h00 (N/T) or over weekends, after hours or Public Holidays (O/T), therefore the service provider must submit rates in the pricing schedule for periods of call out for N/T or O/T.

The service provider to note, the hourly rate submitted for N/T or O/T to cover all labour related costs for call out irrespective of the amount of staff or team members required to assess or perform duties.

All labour rates for the installation of accessories as per Pricing Schedule Item 14 – Supply of Components and Equipment will be claimed from this labour rate allocation when required. The Service provider to supply the estimate hours for the installation of various items when installations are required. The work may only be commenced after approval has been received from the representative of the Employer.

The service provider will be allowed to claim for official travel from local office to various facilities for call outs. Travel kilometres will be reimbursed at the SARS Road Travel rates.

The table below is a guide to indicate the potential issues and severity on the operations of CCT facilities.

The response time is the period the Service Provider has to be on site after the representative of the Employer has made a call out request. The call out will be linked to the penalty Clause 22.1 of the Special Conditions of Contract.

SERVERITY TABLE

Severity Level	Possible issues	Reponses Time required	Penalty for non-compliance to response time
1 – Urgent	<ul style="list-style-type: none"> • Weighbridge/s down • Defective equipment • Weight display unit defective • Cable failure • Defective load cells • Mass measurement / readings not stable 	Within 4 hours	R 1 000.00
2- High	<ul style="list-style-type: none"> • Loss of connectivity / communication • Issue with accuracy of tonnages • Loss of power to one weighbridge or component • Structural damage to weighbridge • Mechanical failure • Drifting of weighbridge readings 	Within 8 hours	R 750.00
3 – Normal	<ul style="list-style-type: none"> • Loose plates • Build-up of sediment / debris • Loose railings • Moisture ingress at junction boxes or load cells • Missing bolts • Loose ducting, cabling or tubing 	Within 24 hours	R 500.00

2.2.2. Adhoc inspection and servicing of weighbridge at any facility

The service provider may be requested to conduct inspections of weighbridges at any facility. The service provider will receive a written request from the representative of the Employer to perform inspection and servicing as and when required. Each inspection must be accompanied by a report and job card before an invoice is paid. The rate for the service is based on the estimated size and load capacity of the weighbridge.

The rate required for the item is based on the size range, capacity range and estimated load cells of the various weighbridges and must include all labour, plant, crane truck, transport or any other equipment required to perform the duties.

2.2.3 Adhoc verification and calibration of weighbridge at any facility

During the contract period, it may be required to perform additional or subsequent verification and calibration of weighbridges at any facility either in terms of regulation or after major repairs were completed. The service provider will be required to inform the representative of the Employer as to the need for any additional verifications and may only perform the required service after written approval has been obtained. The adhoc rate required in the pricing schedule is based on the estimated size and capacity range of the weighbridge. Each verification must be accompanied by a report and job card before an invoice is paid.

The rate for verification or calibration must include all test weights, labour, plant, crane truck, transport or any other equipment required to perform calibration.

2.2.4 Adhoc Repairs

The service provider to take note that during the contract period it may be required to perform adhoc repairs or work at the weighbridges of facilities or mass measuring equipment linked to the transfer stations. The rates supplied for the work to include labour, consumables and any other accessories or material required to deliver the requested services. The service provider to note that adhoc repairs will be allocated on a as and when requirement and only after approval has been requested for the representative of the Employer.

The adhoc repairs may be the following:

- Test and adjust load cells at weighbridges, trolley, bogey or compactor units at any facility
- Repair as required to steel barriers or railings attached as part of weighbridge, the rate requested will be per metre and allowance to be made for removal, taking off site, structural repairs in workshop, returning to site and remounting with bolts, if required painting or galvanising will be required as per existing coating of the railing

3. Supply of Components and Equipment

During the contract period there may be a need to replace specific components or equipment of the weighbridges at any of the facilities.

Allowance under this section is made for the supply only of the listed items. The service provider to note that any labour required for the installation of the items will be allocated as per the rates allowed from call outs rates.

- Supply of lighting protection units
- Supply of load cells (HBM C16 / 30 ton)
- Supply of load cells for trolley, bogey or compactor units
- Supply of weighbridge display / indicator (DUX SL, DUX SS or DUX SG) inclusive of power supply
- Supply of a traffic remote display inclusive of power supply
- Supply of a 8 way Printed circuit board (PCB) for weighbridge inclusive of waterproof junction box / enclosure, glands, connectors, wiring, etc.
- Supply isolated power supply / converter for weighbridge display unit

4. Provisional Sum

A provisional sum has been allocated for any repairs not itemised in the pricing schedule that may be required during the contract period that forms part of the general scope of works for the maintenance and verification of weighbridges. After inspection the service provider will be required to submit a quotation for any repairs that may be required. The representative of the Employer will review and will provide a written approval as confirmation that the proposed repairs may be performed. Once work is completed it must be signed off by the senior on site before an invoice is submitted. Each inspection must be accompanied by a report and job card before an invoice is paid.

Where it is established that the tenderer do not have in-house expertise for any of the work identified during inspections, the tenderer will need to outsource the proposed work by obtaining quotations. The service provider will need to take full responsibility for work completed by the subcontractor. The work may only be performed after written approval has been obtained from the Employer.

All quotes must include labour, parts, transport, and must include a 6 months guarantee on all repairs done.

The service provider will be allowed a markup of 5% on outsourced work.

5. Key Personnel

The requirements for the key personnel that needs to be allocated to the tender can be stated as follows;

i) Repairer/s

Requirements

The repairers must have a **valid repairer certificate** as obtained from NRCS after succesfull completion of a theoretical and practical examination for repair of mass measuring instruments. The certificate must stipulate the repairer's competency to repair mass measuring instruments of similar nature to the mass measuring instruments as specified in the scope of works of the tender. In addition, the repairers must have experience

in the servicing, repairs and maintenance of industrial weighbridges that are similar nature as the key activities in the Scope of Works

The service provider to list two Repairers under this category for evaluation purposes and the average years of experience will be used for point's allocation. Tenderers to note that no points will be allocated if the tenderer only provides one (1) repairer.

ii) Verification Officer

Requirements

The verification officer must have a **valid verification certificate** as obtained from NRCS after successful completion of a theoretical and practical examination for the verification of mass measuring instruments. The certificate must stipulate the verification officer's competency to verify mass measuring instruments of similar nature to the mass measuring instruments as specified in the scope of works of the tender. In addition, the verification officer must have experience in the verification of industrial weighbridges that are similar nature as the key activities in the Scope of Works

The work required in terms of the scope of works is considered to be of a technical nature, requiring considerable expertise therefore it is essential that suitably qualified and experienced personnel be assigned to this project. In terms of the key personnel, the service provider will be required to allocate dedicated repairers and a dedicated verification officer for the requested services.

6. Health and Safety

Prior to accessing any of the City's waste management facilities, the successful tenderer(s)' staff will be required to attend a compulsory Health and Safety briefing session. Whilst performing work on-site at any of the City's waste management facilities, the successful tenderer(s)' staff will be required to comply with all Health and Safety regulations applicable to that facility and their own health and safety rules and ensure compliance with all COVID protocols in the execution of the works.

7. Location of Facilities and Mass measuring instrument information

The tables below 7.1 and 7.2 indicates the location of the solid waste facilities and mass measuring instruments where work will be required during the tender period.

Table 7.1: Facility Locations

FACILITY NAME	STREET ADDRESS	LONGITUDE	LATITUDE
Athlone Refuse Transfer Station	Bhunga Avenue, off N2, Langa	18.51557	-33.94909
Bellville Landfill	Rotterdam Road, Sacks Circle, Bellville South	18.64894	-33.93516
Bellville Compost Plant	Rotterdam Road, Sacks Circle, Bellville South	18.65155	-33.93088
Bellville Refuse Transfer Station	Sacks Circle, Bellville South	18.64803	-33.93191
Coastal Park Landfill	Off Baden Powel Drive, Muizenberg	18.50214	-34.09197
Kraaifontein Integrated Waste Management Facility	Corner of Maroela and Sandringham Roads, Kraaifontein	18.73799	-33.83808
Swartklip Refuse Transfer Station	Swartklip Road, Mitchells Plan	18.64647	-34.05183
Vissershok Landfill	Frankdale Road, off N7, Milnerton	18.54485	-33.77388
Durbanville Traffic Department	Corner of Church Street and De Villiers Drive, Durbanville	18.65390	-33.82961

Table 7.2: Guideline to mass measuring instruments at various facilities

FACILITY	IN / OUT	ESTIMATED SIZE	ESTIMATED CAPACITY	ESTIMATED AMOUNT OF LOAD CELLS	TYPE OF INSTALLATION	COMMENTS
Athlone Refuse Transfer Station	In	8m x 3m	40 tons	4	Pit mounted	Weighbridge
	Out	17m x 3m	60 tons	8	Pit mounted	Weighbridge
	Line 1	n/a	30 tons	4	n/a	Container trolley at Waste compactor area
	Line 2	n/a	30 tons	4	n/a	Container trolley at Waste compactor area
	Line 3	n/a	30 tons	4	n/a	Container trolley at Waste compactor area
Bellville Compost Plant	In	12m x 3m	40 tons	4	Pit mounted	Weighbridge
Bellville Landfill	In	17m x 3m	60 tons	8	Pit mounted	Weighbridge
	Out	24m x 3m	60 tons	10	Pit mounted	Weighbridge
Bellville Refuse Transfer Station	In	26m x 3.3m	60 tons	10	Raised	Weighbridge / canopy over full length
	In	26m x 3.3m	60 tons	10	Raised	Weighbridge / canopy over full length
	Out	26m x 3.3m	60 tons	10	Raised	Weighbridge / canopy over full length
	Out	26m x 3.3m	60 tons	10	Raised	Weighbridge / canopy over full length
Coastal Park Landfill	In	23m x 3m	60 tons	10	Raised	Weighbridge
	In	23m x 3m	60 tons	10	Raised	Weighbridge
	Out	23m x 3m	60 tons	10	Raised	Weighbridge
Kraaifontein Integrated Waste Management Facility	In	24m x 3.2m	60 tons	10	Raised	Weighbridge, partial canopy
	In	24m x 3.2m	60 tons	10	Raised	Weighbridge, partial canopy
	Out	24m x 3.2m	60 tons	10	Raised	Weighbridge, partial canopy
	Out	24m x 3.2m	60 tons	10	Raised	Weighbridge, partial canopy
	Line 1	n/a	40 tons	4	n/a	Bogey at Waste compactor area
	Line 2	n/a	40 tons	4	n/a	Bogey at Waste compactor area
	Line 3	n/a	40 tons	4	n/a	Bogey at Waste compactor area
Swartklip Refuse Transfer Station	In	24m x 3.2m	60 tons	10	Pit mounted	Weighbridge
	Out	24m x 3.2m	60 tons	10	Pit mounted	Weighbridge
	Line 1	n/a	30 tons	4	n/a	Container trolley at Waste compactor area
	Line 2	n/a	30 tons	4	n/a	Container trolley at Waste compactor area
	Line 3	n/a	30 tons	4	n/a	Container trolley at Waste compactor area
Vissershok Landfill	In	24m x 3.2m	60 tons	10	Raised	Weighbridge
	Out	24m x 3.2m	60 tons	10	Raised	Weighbridge
Durbanville Traffic Department		4m x 3m	30 tons	4	Pit mounted	Weighbridge

8. TRADE NAMES OR PROPRIETARY PRODUCTS

TENDERERS MUST NOTE THAT WHEREVER THIS DOCUMENT REFERS TO ANY PARTICULAR TRADE MARK, NAME, PATENT, DESIGN, TYPE, SPECIFIC ORIGIN OR PRODUCER, SUCH REFERENCE SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS 'OR EQUIVALENT'

9. EMPLOYMENT OF SECURITY PERSONNEL (not applicable)

All security staff employed by the supplier on behalf of the CCT or at any CCT property must be registered with Private Security Industry Regulatory Authority (PSiRA). Proof of such registration must be made available to the CCT's agent upon request.

10. FORMS FOR CONTRACT ADMINISTRATION

The supplier shall complete, sign and submit with each invoice, the following:

- a) Monthly Project Labour Report (**Annex 14.1**). (Not applicable)
- b) B-BBEE Sub-Contract Expenditure Report (**Annex 14.2**).
- c) Joint Venture Expenditure Report (**Annex 14.3**).

The Monthly Project Labour Report must include details of all labour (including that of sub-contractors) that are South African citizens earning less than R350.00 per day, as adjusted from time to time (excluding any benefits), who are employed on a temporary or contract basis on this contract in the month in question.

In addition to the Monthly Project Labour Report the Supplier shall simultaneously furnish the CCT's Agent with copies of the employment contracts entered into with such labour, together with certified copies of identification documents, proof of attendance in the form of attendance register or timesheets as well as evidence of payments to such labour in the form of copies of payslips or payroll runs. If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it and proof of such acknowledgement shall be furnished to the CCT's Agent.

The Monthly Project Labour Reports shall be completed and submitted in accordance with the instructions therein.

The **B-BBEE Sub-Contract Expenditure Report** is required for monitoring the supplier's compliance with the sub-contracting conditions of the **Preference Schedule**.

The Joint Venture Expenditure Report is required for monitoring the joint venture's/consortium/partnership compliance with the percentage contributions of the partners as tendered, where the joint venture/consortium/partnership has been awarded preference points in respect of its consolidated B-BBEE scorecard.