REQUEST FOR INFORMATION

RFI NUMBER:	JW RFI 15/12/2025	**CLOSING DATE:**	22 DECEMBER 2025
DESCRIPTION:	**PROCUREMENT OF SIX CLOSED CIRCUIT TELEVISION UNITS TO DO CONDITION ASSESSMENT INSPECTIONS OF JOHANNESBURG WATERS SEWER RETICULATION**		
ISSUE DATE	15 DECEMBER 2025		
Submit via eTender portal:	https://www.etenders.gov.za/Home/opportunities?id=1		

ENQUIRIES MAY BE DIRECTED TO:			
Bidding procedure enquiries must be sent to		**Technical enquiries must be directed to**	
CONTACT PERSON	Maria Chirrindze	**CONTACT PERSON**	Lenah Motaung
TELEPHONE NUMBER	011 688 6610	**TELEPHONE NUMBER**	011 688 1945
E-MAIL ADDRESS (Submissions must be made to this address)	maria.chirrindze@jwater.co.za	**E-MAIL ADDRESS**	lenah.motaung@jwater.co.za

SUPPLIER INFORMATION				
NAME OF BIDDER				
STREET ADDRESS				
TELEPHONE NUMBER	**CODE**		**NUMBER**	
CELLPHONE NUMBER				
E-MAIL ADDRESS				
VAT REGISTRATION NUMBER				
CENTRAL SUPPLIER DATABASE No:	MAAA			
MANUFACUTER OR THIRD PARTY (If Applicable)				

1. PURPOSE OF THE REQUEST FOR INFORMATION

To assist the organisation with business decision making purposes for an upcoming Request for Tender with regards to budget, cost effectiveness, risk assessment, specific goals to include in the tender, award and allocation strategy to incorporate, non-firm prices, pricing schedule and special conditions of tender.

2. BACKGROUND

Johannesburg Water invites service providers to respond to a Request for Information for the **supply, deliver and servicing of six (6) closed circuit television units for condition assessment inspections of Johannesburg Waters sewer reticulation.** This RFI is strictly to solicit market related information from potential bidder(s) for the supply, delivery and servicing of **six (6) closed circuit television units for condition assessment inspections of Johannesburg Waters sewer reticulation.** This RFI does not constitute; an offer; or any impression none so ever to do business with Johannesburg Water.

3. SCOPE OF WORK AND SPECIFICATIONS

3.1. CONTRACT DESCRIPTION

- The service provider(s) shall be required supply and deliver a total of six (6) CCTV units.
- The Service Provider is to include a five (5)-year repair and maintenance plan to service, inspect, repair and maintain all six of the units periodically as required and as detailed further in this report.
- The Services Provider is to make provision to train the JW team consisting of one (01) Operator and two (02) workers per CCTV unit, and plus three (3) Managers.
- The Services Provider is to make provision to train the JW staff for condition assessment of the sewer networks from the actual CCTV inspections. (i.e. Management reporting).
- The Service Provider is to provide a Standard Operating manual for all units supplied and IT related procedures and troubleshooting.
- The Service Provider is to provide all technical data and specs on the CCTV units supplied.

3.2. REQUIREMENTS

3.2.1 THE CCTV UNITS

The service provider(s) shall be required supply and deliver a total of six CCTV units. The CCTV units are to consist of the following equipment: -

- Camera head mounted on a tractor system to access pipes from 150 mm diameter upwards (Maximum pipe diameter to specified and confirmed by supplier).
- Cable drum with 180m cable.
- Operating Console.
- Power System.
- Software

The specifications for the new CCTV units are as follows: -

- Inspection equipment (tractor and camera)
- Cable drum
- Operating console, software and power system
- Data display
- Linear measurement
- Reporting
- Database software and requirements
- Decision support module
- Camera vehicles
- Additional factors

3.2.2 INSPECTION EQUIPMENT (TRACTOR AND CAMERA)

- The camera must be transported through the pipe on a tractor system, to allow for smooth transportation of the camera through the pipe.

- The tractor must be controllable at various speeds in forward and reverse and must be able to operate in pipes from 150mm upwards.

- The tractor must be 4-wheel drive system and be able to overcome obstacle heights up to 15% of the pipe diameter.

- The tractor must have internal pressure reporting and be able to work at depths up to 2m.

- Details for additional wheels for larger pipes must be supplied.

- The camera system must be capable of measuring the slope of the pipe being inspected (Inclinometer). The instantaneous angle must be filtered and is to be displayed on the screen and recorded in the software system. In addition, start and end backfall incidents must be displayed on the pipeline profile, and the “depth” of backfall (fall in invert level) must be computed and displayed.

- The start and end of a critical backfall as determined by inclinometer must be fed to the database and logged as an incident.

- The camera mounted on the tractor must be mounted in such a manner as to transport the camera within 10% of the centre of the pipe and be forward mounted on the tractor.

- The camera must have the capability to pan, tilt and zoom. Pan function must be 0-360 degrees; Tilt function must be -90degrees to +90degrees and the zoom function must be 10x optical zoom and 10x digital zoom.

- The camera must be fully remote control including remote focus, automatic upright positioning and light control.

- The cameras construction material must be clearly stated and an aluminium body with stainless steel gears would be preferred.

- The resolution and picture quality must be specified by the supplier and must be sufficiently sharp so that any fault can be seen clearly.

- Pan-and-rotate cameras must have adjustable focus. The distance along the pipe in focus from the initial point of observation shall be a minimum of twice the vertical height of the pipe.

- The combination of object illumination and light sensitivity of the camera shall be adequate to obtain an effective picture of the structure of the sewers or pipelines to be surveyed without loss of contrast or flare out of picture or shadowing.

- The camera must have LED lighting for pipes up to 250mm diameter or to provide lighting to illuminate the pipe sufficiently to allow for the detection of cracks and other structural defects in the pipe. The lighting must be of such a nature that the natural colour of the pipe is recorded (No black & white CCTV will be acceptable). Details for additional lights for larger pipes must be supplied.

3.2.3 CABLE DRUM

- The cable drum must be stainless steel.
- The cable drum must have a motor rewind, drum clutch, support boom and cable length counter.
- The cable must have a minimum range of inspection of 180m allowing for 2 manhole lengths.

3.2.4 OPERATING CONSOLE, SOFTWARE AND POWER SYSTEM

- All data must be recorded on the systems software for later reporting and condition assessment.
- The operating system should be windows based.
- The system must have the capability to download data to the data base and must have the capability to store and save “still” photos from within the inspection.

3.2.5 DATA DISPLAY

- A data generator shall electronically generate and clearly display on the viewing monitor and video recording a continuous record of data in an alpha numeric form containing the following minimum information:
  - Automatic update of the camera’s position in the pipeline from adjusted zero to relevant point.
  - Pipe dimensions
  - Pipeline, location, road name and manhole reference numbers.
  - Instantaneous angle and upstream/downstream direction of inspections.

- The text generator must have a function that will remove and replace all data on screen so as to allow an unobstructed view of the entire screen when required.
- The text generator shall have a real time clock and calendar on screen to indicate the progress on the survey.

3.2.6 LINEAR MEASUREMENT

- The CCTV monitor display shall incorporate an automatically updated record in meters and tenths of meters of the camera location within the pipelines accurate to + 1% or 0.3m whichever is the greater.
- The meter reading entered onto the display at the start of the survey must represent the actual distance from the accepted start of the length of sewer or pipeline.

3.2.7 REPORTING

All reporting shall be done according to a Sewer Classification Manual, details of which must be supplied to JW with the equipment. The reporting system must make provision to include the following data: -

- Suburb.
- Street Name.
- Street Number.
- Stand Number.
- Manhole number.

- Manhole Type. (I.e. Straight through, angle or join).
- Manhole cover GPS co-ordinates (x, y, and z) (to be supplied from manhole surveying).
- Manhole depth to invert of pipe.
- Manhole benching operation.
- Manhole general condition.
- Pipe Number.
- Pipe diameter.
- Inclinometer data.
- Defects reported and graded.
- Lateral identification (including orientation and erf number).
- Method of cleaning.
- Cleaning distance.
- Pre or post CCTV cleaning.
- Any other relevant information.

3.2.8 DATABASE SOFTWARE AND REQUIREMENTS

Johannesburg Water currently operates IMQS and GIS. Provision must be made to incorporate the existing CCTV system with the current JW systems to include the following: -

- Importing of CCTV camera reports into existing systems.
- Critical data error detection and reporting.
- Filtering of data by criteria or dates.
- Importation of pipe diameters, manhole numbers, pipe slopes and root theme.
- Automatic generation of CCTV inspection works orders as well as cleaning or rehabilitation works orders.
- Automatic video search from database.
- Automatic report generation in several combination choices.
- Works order history.
- A decision support module for future replacement rehabilitation.
- Filtering and show the history of events on any pipeline in chronologic order.

3.2.9 DECISION SUPPORT MODULE

The decision support module must be accessible from the main database front-end directory. It must give rough guidance on:

- If point repairs or replacement / rehabilitation are indicated.
- Approximate cost of point repairs (if indicated and provided the pipe is afterwards in good serviceable condition – that point repairs are cost effective.
- Approximate cost of replacement by pipe bursting (if replacement is indicated).
- Approximate cost of replacement by soft liners (if replacement is indicated).

All details of the proposed power system are to be supplied.

The tenderer must be prepared to provide a practical demonstration of the systems abilities.

3.2.10 CAMERA VEHICLES

- The system must be a “plug and play” system, i.e. able to be interchanged between vehicles and not integrated into the actual vehicle.

- Provision must be made for the installation of the equipment into the suitable vehicle, including all shelving, storage boxes, etc. (Vehicles are supplied by JW).

3.2.11 ADDITIONAL FACTORS

- Provision for training must be made for 1 Operator and 2 workers per CCTV unit
- Provision for training of JW staff must be made in terms of condition assessment of the sewer networks from the actual CCTV inspections. (i.e. Management reporting).
- A full set of spares for each camera must be supplied as per the supplier’s recommendation.
- A full repair and maintenance proposal must be included.
- Any alternate technology that deviates from the above may be considered.
- The details of any portable systems and push cameras that the suppliers may have for the inspection of smaller diameter pipes and ad-hoc inspections, must be supplied, and may also be considered.

3.3 FIVE (05) YEAR REPAIR AND MAINTENANCE CONTRACT REQUIREMENTS

The Service Provider will be required to enter a five (05) year repair and maintenance contract for the CCTV units.

The Service Provider must also indicate what the expected turnaround times will be should a breakdown occur, i.e. A Service Level Agreement will need to be agreed with the successful Service Provider in terms of minimum downtime due to breakdowns for Johannesburg Water.
The list below gives an indication of which items require regular servicing and maintenance, but the Service Provider would need to specify the frequency in terms of specifications of the equipment that is to be serviced.

3.3.1 PREVENTATIVE MAINTENANCE

- Routine inspections of the camera head, tractor system, cable drum, operating console, power system, and software.
- Software updates and calibration of measurement and reporting systems.
- Verification and testing of data display, linear measurement, reporting, database software, and decision support modules.

3.3.2 CORRECTIVE MAINTENANCE

- Troubleshooting and repair of equipment failures or malfunctions.
- Replacement of faulty parts and components, including camera heads, cables, sensors, and electronic modules.
- Restoration of software or system functionality following faults or errors.

3.3.3 RESPONSE TIMES

- Maximum turnaround times for breakdowns to ensure minimal operational downtime, as agreed in the Service Level Agreement (SLA).

3.3.4 SPARE PARTS AND CONSUMABLES

- Provision of necessary spare parts and consumables required for maintenance and repairs.
- Inventory management and timely delivery of spare parts to JW facilities.

3.3.5 SUPPORT AND TRAINING

- Training for JW staff on operation, troubleshooting, and basic maintenance.
- Technical support, including remote assistance if required.

3.3.6 REPORTING AND DOCUMENTATION

- Detailed maintenance logs and reports for each service visit.
- Annual summary report of all maintenance and repairs carried out, including downtime statistics.

3.3.7 EMERGENCY/AFTER-HOURS SUPPORT

- Availability of technical support during emergencies or outside normal business hours.

3.3.8 EXTENDED MAINTENANCE PLAN

- Optional extended maintenance beyond the initial five-year period, if required.

3.3.9 END-OF-LIFE PLANNING

- Recommendations for equipment upgrades or replacement after the contract term.
- Availability of technical support during emergencies or outside normal business hours.

3.3.10 ADDITIONAL RECOMMENDED MAINTENANCE ITEMS

The repair and maintenance contract for the CCTV units must include all items listed in Sections 3.3.1 to 3.3.9, as well as any additional components, activities, or services that the service provider deems necessary but are not explicitly specified. These additional items must be priced under **Part B** of the pricing schedule.

Service providers are encouraged to review the existing maintenance scope and propose any supplementary items or enhancements required to ensure the effective, safe, and reliable operation of the CCTV units. Where such additions are recommended, the service provider must submit a detailed proposal outlining the justification, full description, technical requirements, and any applicable standards associated with each item.

All proposed additions must be reflected in **Part B** of the submitted report, accompanied by corresponding pricing in **Part B** of the pricing schedule supporting comprehensive evaluation and benchmarking

Part B: Additional Recommended Maintenance Items Template

Service providers must use the template below to propose any additional items, components, activities, or services they deem necessary for effective CCTV maintenance. Each proposed item must be accompanied by full technical details, justification, and pricing.

Note 1: *The table below can be extended by service providers to include additional rows as required.*

Note 2.: *The terms below refer to:*

Estimated Turnaround Time *– Time required to complete the service or repair of the item (e.g., hours or days).*

Estimated Downtime Impact *– Expected period the CCTV or related system will be out of operation during the service.*

ITEM NO.	PROPOSED ITEM / COMPONENT / SERVICE	FULL DESCRIPTION (INCL. TECHNICAL SPECS)	JUSTIFICATION / REASON FOR INCLUSION	APPLICABLE STANDARDS (SABS / ISO / ISIO / OEM)	ESTIMATED TURNAROUND TIME	ESTIMATED DOWNTIME IMPACT

ITEM NO.	PROPOSED ITEM / COMPONENT / SERVICE	FULL DESCRIPTION (INCL. TECHNICAL SPECS)	JUSTIFICATION / REASON FOR INCLUSION	APPLICABLE STANDARDS (SABS / ISO / ISIO / OEM)	ESTIMATED TURNAROUND TIME	ESTIMATED DOWNTIME IMPACT

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PRICING

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Note. The pricing schedule consists of two components. Part A covers the pricing for the full scope of the stipulated contract, as outlined in the specifications and scope section. Part B covers any additional items that the service provider believes should be included as part of the maintenance contract.

Part A: Contracted Scope Pricing

Delivery time: _____**Weeks**
(The tender must stipulate the delivery time in weeks)

Item Nr.	Description	UOM	Estimated QTY for the duration of the contract	Unit price (Excl. 15% VAT)	Estimated Required Budget (Unit rate x Est. QTY) (Excl. 15% VAT)
1	Complete CCTV units including technical specifications as listed in the specifications and scope detailed in section 5 of this document as well as items listed below this pricing schedule. (alternates will be considered).	Per unit	6	R	R
2	Five (5)-year repair and maintenance agreement brought forward as per list below	Per unit	6	R	R
3	IT-support and trouble shooting	hr		R	R
4	Delivery costs	Lot	1	R	R
5	Service manuals and Standard Operations Procedures (SOPs)	Lot	1	R	R
6	Training of JW staff	Per operator	6	R	R

		Per worker	12	R	R
		Per manager	3	R	R
	Sub-Total		**R**		**R**
	Contingencies (10%)		**R**		**R**
	Total including contingencies (Excl. 15% VAT)		**R**		**R**
	15% VAT		**R**		**R**
	Total required budget (Incl. 15% VAT)		**R**		**R**

Part B: Additional Recommended Maintenance Items Pricing

Item Nr.	Description	UOM	Estimated QTY for the duration of the contract	Unit price (Excl. 15% VAT)	Estimated Required Budget (Unit rate x Est. QTY) (Excl. 15% VAT)
1.				R	R
2.				R	R
3.				R	R
4.				R	R
5.				R	R
6.					
7.					
8.					
9.					
10					
11					
12					
13					
14					
15					

Item Nr.	Description	UOM	Estimated QTY for the duration of the contract	Unit price (Excl. 15% VAT)	Estimated Required Budget (Unit rate x Est. QTY) (Excl. 15% VAT)
16					
17					
18					
19					
20					
	Sub-Total		**R**		**R**
	Contingencies (10%)		**R**		**R**
	Total including contingencies (Excl. 15% VAT)		**R**		**R**
	15% VAT		**R**		**R**
	Total required budget (Incl. 15% VAT)		**R**		**R**

Prices Firm / Non-Firm? _____

Suppliers to complete the below according to their company details.

INFORMATION FOR SPECIFIC GOALS ANALYSIS	
BUSINESS OWNED BY 51% OR MORE -BLACK PEOPLE	
1. Percentage (%) of Black Ownership**)**	
2. Is Black Ownership 51% or more? **(Yes or No)**	
BUSINESS OWNED BY 51% OR MORE – BLACK YOUTH	
1. Percentage (%) of Ownership by Black Youth	
2. Is the percentage of Black Youth Ownership 51 % or more? **(Yes or No)**	
BUSINESS OWNED BY 51% OR MORE-WOMEN	
1. Percentage (%) of Ownership by People who are Women	
2. Is the percentage of People who are Women 51 % or more? **(Yes or No)**	
BUSINESSES LOCATED WITHIN THE BOUNDARIES OF A REGION IN COJ, COJ MUNICIPALITY OR IN GAUTENG PROVINCE	
1. Is your business located in the Gauteng Province? **(Yes or No)**	
2. Is your business located in the COJ Municipality? **(Yes or No)**	
3. Is your business located within the region of the COJ? **(Yes or No)**	
BUSINESS OWNED BY 51% OR MORE - BLACK PEOPLE WHO ARE MILITARY VETERANS	
1. Percentage (%) of Ownership by Black People Who Are Military Veterans	
2. Is the percentage of Ownership by Black People Who Are Military Veterans 51% or more? **(Yes or No)**	
BUSINESS OWNED BY 51% OR MORE-BLACK PEOPLE WITH DISABILITIES	
1. Percentage (%) of Ownership by Black People With Disabilities	
2. Is the percentage of Ownership by Black People with Disabilities 51% or more? **(Yes or No)**	
SMME (AN EME OR QSE) OWNED BY 51% OR MORE - BLACK PEOPLE	
1. What is the Enterprise Type? EME – turnover is less than R10m QSE – Turnover between R10m and R50m Generic – Turnover is R50M of more	
JOINT VENTURE (JV), CONSORTIUM OR EQUIVALENT	
1. What is the percentage (%) of ownership for each party?	
SUBCONTRACTING WITH COMPANIES AT LEAST 51% OWNED BY HISTORICALLY DISADVANTAGED INDIVIDUAL (HDI) GROUPS MENTIONED ABOVE	

1. What is the percentage (%) that will be sub-contracted to companies that are at least 51% owned by Historically Disadvantaged Individual (HDI) groups mentioned above?	

INFORMATION PRICE BREAKDOWN			
DESCRIPTION	**BREAKDOWN IN PERCENTAGE**	**APPLICABLE INDEX**	**IMPACTED BY ROE (YES/NO)**
Raw materials			
Direct Labour			
Direct Overheads			
Transport			
Indirect Labour			
Indirect Overheads			
Total	**100%**		

provide the following information (if Applicable)

TYPICAL PRICE ADJUSTMENT FORMULA INCLUDING INTERVALS

SUBMITTED DOCUMENTATION IN SUPPORT OF A REQUEST FOR A PRICE ADJUSTMENT

SOURCE OF RAW MATERIAL	
DESCRIPTION	**COUNTRY OF ORGIN**
Raw materials	

ASSOCIATED RISKS	
RISK CATEGORY	**RISK MITIGATION**
Economic:	
Security of Supply	
Supply and Demand	
Rate of Exchange	
Operational:	
Capacity	
Logistics	