



ETHEKWINI WATER AND SANITATION UNIT
Enquiries: Devesh Ramghulam
CC: Shalina Ramnund, Terence Thumbaya

TO: TENDERERS

CLUSTER: TRADING SERVICES

UNIT: WATER AND SANITATION

REFERENCE: TONGAAT WATER TREATMENT WORKS TWTW FUNCTIONAL UPGRADE: WARD 62.

AUTHOR: DEVESH RAMGHULAM

SUBJECT: NOTICE TO TENDERERS NO. 1

DATE: 24 JUNE 2025

Tenderers for the abovementioned Contract are hereby notified as follows:

This notice is issued in accordance with Clause F.3.2 of the Conditions of Tender. All tenderers are instructed to incorporate the changes and clarifications detailed herein into their tender submissions.

1. CLARIFICATIONS AND RESPONSES

Clarification Request	Response
We are the sole distributors for Rotork in KwaZulu-Natal who supply, maintain and repair actuators for eThekweni. I see that the eThekweni Tongaat Water Treatment Works Functional Upgrade project includes multiple electric actuators. Please can you share the attendance register of the site briefing held on 09/06/2025 so that we can quote the various contractors on the actuator scope.	The attendance register is included as Annexure A to this notice.
I am writing this email to enquire about getting the attendance register.	The attendance register is included as Annexure A to this notice.

Clarification Request	Response
As mentioned to you, we will be quoting on the supply of the electric Actuators, but we noticed the BOQ states that Actuators are to suit Resilient Seal Gate Valves, but during the site walk, the existing valves are all Butterfly Valves, can you please clarify with your team if the valves to be supplied are RSV or Butterfly Valves	The valves to be supplied are Butterfly Valves. Refer to Actuator Particular Specifications.
Kindly assist by providing the below for the abovementioned tender, thanks. 1. EMP 2. Piling foundation layout contained in SECTION 4: FLOCCULATION TANKS	Refer to C3.4. Piles are shown on the Inlet Works and Mixers drawing (Drawing No. 60398/35).
Kindly send the following drawings as it was not included on the website. Attached Ethekwini Standard Drawings	Included as additional drawings to Annexure C3.5.
Find below request for information: Section: Electric Actuators Clarifiers – Desludge Valves - BOQ 1. Item 14.3.1.1 and Item 14.3.1.2 – Are actuators to be fitted on free issued RSVs? If so, torque figures of valves required Section: Electric Actuators Filters – Backwash & Air Blower Valves – BOQ 1. Item 14.3.2.1 – Item 14.3.2.3 – Are Actuators to be fitted on free issued RSVs? If so, torque figures of valves required	Refer to Actuator Particular Specifications (PS ACT). Actuators are to be fitted to butterfly valves.
Please find attached the letter for your attention from Unik Civil Engineering for the above-mentioned tender for extension of closing date.	The tender closing date has been extended by two (2) weeks, to Friday, 25 July 2025 at 11:00.
We are currently preparing a tender submission for Contract No: 31302-5W — Tongaat Water Treatment Works Functional Upgrade. Due to the complexity of the scope and the detailed coordination required among multiple disciplines, we respectfully request a one-month extension to the current closing date of Friday, 4 July 2025. An extension would allow us to prepare a comprehensive and competitive proposal that aligns with the project's technical and commercial expectations. We would greatly appreciate your consideration of this request, and we remain committed to delivering a high-quality submission.	The tender closing date has been extended by two (2) weeks, to Friday, 25 July 2025 at 11:00.
Trust all is well. Would it be possible to receive a copy of the site attendance register for the above-mentioned tender? Your assistance is appreciated.	The attendance register is included as Annexure A to this notice.
The request for clarification regarding Provisional Amounts / Sums in the BOQ document referenced as 31302-5W_BOQ.	Provisional Sum amounts have been listed in Section 2 below.

2. ADDENDA TO THE TENDER DOCUMENT

All tenderers are instructed to incorporate the addenda detailed herein into their tender submissions.

2.1 Site Meeting Minutes

The minutes of the compulsory site clarification meeting is included as Annexure B.

2.2 Tender Closing Date

Please be advised that the closing date for the submission of the tender document has been extended to Friday, 25 July 2025 at 11h00.

2.3 Schedule 5: Waterworks Equipment

The Table below highlights the provisional sum amounts within Schedule 5.

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
5.1.1.21	PWW 13.3	Provisional sum for the provision of additional safety equipment and signage as directed by the Engineer.	Prov Sum	1.00	75,000.00	75,000.00
5.1.1.22		Contractor's mark-up for overheads and profit on item above	%	75,000.00		
5.1.6.3		Provision sum for the provision of additional safety equipment and signage to improve the safety of the installation as directed by the Engineer.	Prov Sum	1.00	75,000.00	75,000.00
5.1.6.4		Contractor's mark-up for overheads and profit on item above	%	75,000.00		
5.1.6.5		Allowance for the assessment, testing, report, recommendation, rehabilitation/servicing of the existing chlorine dosing system. Including for the testing, servicing, and calibration of the existing load cells for the 1t chlorine tanks.	Prov Sum	1.00	300,000.00	300,000.00
5.1.6.6		Contractor's mark-up for overheads and profit on item above	%	300,000.00		
5.1.6.9		Civil works for bollard protection and chain at chlorine house to protect from skip loading/unloading etc.	Prov Sum	1.00	75,000.00	75,000.00
5.1.8.2		Provision of laboratory equipment	Prov Sum	1.00	200,000.00	200,000.00
5.1.8.3		Contractor's mark-up for overheads and profit on item above	%	200,000.00		
5.1.9.1		Provision for critical spares	Prov Sum	1.00	1,000,000.00	1,000,000.00
5.1.9.2		Contractor's mark-up for overheads and profit on item above	%	1,000,000.00		
5.1.9.3		Provision for the supply and delivery of chemicals required for the dosing systems at the water treatment works for continuous operation over the 6 months trial period.	Prov Sum	1.00	1,000,000.00	1,000,000.00
5.1.9.4		Contractor's mark-up for overheads and profit on item above	%	1,000,000.00		

2.4 Schedule 15: Electrical & Instrumentation

The Table below highlights the provisional sum amounts within Schedule 15.

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
15.4.1.8		h) Allow a provisional sum of R 175 000,00 to upgrade and re-programme the existing SCADA system in the EWS Control Room to include the WTW and all the reservoirs sites (by certified system integrator for the equipment supplied).	Prov Sum	1.00	75,000.00	75,000.00
15.4.1.9		i) Allow for profit and attendance on above item	%	75,000.000		
15.4.1.10		j) Allow an provisional amount of R 75 000,00 for the modifications of the control systems for the operation of the pumping systems	Prov Sum	1.00	65,000.00	65,000.00
15.4.1.11		k) Allow for profit and attendance on item above	%	65,000.00		

Tenderers are to acknowledge receipt of this NOTICE No. 1, Contract 31302-5W by signing and emailing [this page](#) back to **Terence.Thumbaya@naiduconsulting.com & Devesh.Ramghulam@naiduconsulting.com** by 02/07/2025.

Tenderers are to attach an original, signed copy of this NOTICE No. 2, to the inside of the front cover of the tender document. Failure to meet this requirement will result in the tender submission being made non-responsive.

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N. THUMBAYA

EMPLOYER’S AGENT:

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SIGNATURE OF TENDERER

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NAME OF TENDERER

.....

DATE

COMPANY STAMP



WATER AND
SANITATION

ATTENDANCE REGISTER

NAIDU
CONSULTING

31302-5W - Tongaat Water Treatment Works Functional Upgrade

Clarification Meeting

Date: 09 June 2025

No.	Representative Name	Company Name	Cell Number	Email Address	Signature
1	Mandlenkosi Khomo	Sifo Ntobinda JV	073 2180419	info@siifoh.co.za	
2	Admire Nhamo	TEFLA GROUP	0113442132	sales@tefla.co.za	
3	IRFAAN MASTHAN	WK CONSTRUCTION SA	082 9039777	tenders@wkusa.co.za	
4	NTANDO CENISA	GWISH CONSULTANTS	082 2674921	admin@gwishgroup.co.za	
5	KHUKHANI MBATHA	LIHANGA TRADING	0315039001	Semco@lihangsa.co.za	
6	WISDOM MBAYUWA	ROSS Construction	082 5860086	info@rossconstruction.co.za	
7	Kerusha Pillay	Leomat Plant Hire	083 2794746	kerusha@leomatdhn.co.za	
8	Constance Shorungu	LUBE PROJECTS	078 8941171	richard@lube.co.za	
9	LINDANI SIKHONA	KORONE ENGINEERS	0793246827	lindani.sikhona71@gmail.com	
10	Siphenhlanhla Chame	Empire Engineering	083 5300021 061 4025408	info@empireengineering.co.za	
11	Jc Jiba	Black Bulls building & Roofing JV	082 6378860	jibayanda@gmail.com	
12	NTOKOZO NABANIÉ	LENO 87 SOLUTIONS	084 5637746	Admin@leno87.co.za	
13	Anna Deodutt	Stefanetti Stocks	082 3166966	anna.deodutt@stefanetti.co.za	
14	KEVIN	AUMAMAT	083 6832502	rep@aumamat.co.za	
15	Sudarshan Chetty	Autotronic	078 804 2285	sudarshan@autotronic.co.za	

No.	Representative Name	Company Name	Cell Number	Email Address	Signature
16	NONKANTISO CHILI	LECH INTECH	0603097950	nkanyichili@gmail.com	N
17	RAJIV I	LECH INTECH	0659803654	lechi@lechi.co.za	
18	Sandile	Artisan Construction	03152664940	estimating@artisan.co.za	
19	Zamani Msewenge	Tamzo Civils	0877434100	admin@tamzocivils.co.za	
20	Fina Mocheko	KSB Pumps	0834095757	fina.mocheko@ksb.com	
21	Mongezi	Isoltech Construction	0839630518	mongezi4@gmail.com / info@isoltech.co.za	
22	Graham Gorman	Icon	0820080004	gorman@iconconstruction.co.za	
23	Antonio Chisa	Aullini	0134098363	Antonio@avillini.co.za	
24	Nolene Naidoo	Goss & Balke	0662173055	Sunil@gossbalke.com	
25	Corne Vermas	Dopleze Automation	0765302617	sameera@ageleze.co.za	
26	S. Nkwenya	Suburban Civils & T/A Phun	0718357662	Megan.Pileon@gmail.com	
27	Mark George	Zanamani	0047513578	mark@zanamanzi.co.za	
28	Tsepo Mabaza	Grand Connections	0792472763	grandconnections@gmail.com	
29	Siphesihle Ngatsha	Isiphesihle Water Services	0310075634	tenders@isiphesihle.com	
30	Aphine Mbonambi	Zonke Izinkonzo Trading	0615004664	gmbonambi@gmail.com	
31	Kerosian Puliani	SE	0711505725	kero.puliani@se.com	
32	Thubakhe Dlamini	NickelDIA Trading	0100549869	Admin@nickeldia.co.za	
33	Kennan Chitunso	AUMANAT	0636832562	rep@aumanat.co.za	

No.	Representative Name	Company Name	Cell Number	Email Address	Signature
34	STRINI KUMA	SIXAPHAMBILI INO	0781110664	sik info@sit-enterprise.co.za	
35	Comie Venter	Schiebel	0765302677	comie@schiebel.co.za	
36	Clive Wilson	Valvespec	076 204 3444	clives7@valvespec.co.za	
37	Sabelo Khoza	Remako Group Holdings	083 5178593	info@remakogroup.co.za	
38	Thabakhe Dlamini	Nickelodiya Traders	083 3704818	nickelodiya@nickelodiya.co.za Nwabingane@h	
39	Stefanie Dlamini	SHIKANI TRADING	082 0636818	shikani@ymail.com	
40	Nyaboko	USWAZI Construction	082 9745413	uswazi@uswazi.co.za	
41	Syabonga	Magbana Plant	031 1702772	info@magbana.com	
42	Sanele Mkhoba	Electro Mech Data	0636593796	electromechdata@gmail.com	
43	SIMONE MABASE	NWS SA	082 7457255	info@nwsconsulting.co.za	
44	BOETIE	UNIK CIVIL ENGINEERING	0113180777	tenders.sa@unikconst.com	
45	ANGULO FAN	UNIK CIVIL ENGINEERING	0798015151	pmf.bw@unikconst.com	
46	NDUMISO NZUZA	NDC JV	0315378451	ndumiso@ndc-group.co.za	
47	Nkosingiphile	Tarcon Projects	072 652846	Info@tarcon.co	
48	Glen Moseley	WMP Construction	0836491446	glen@wmpconstruction.co.za	
49	JITESH HEERALALL	ELECTRON	0828196422	jittesh@electron-sa.co.za	
50	SIPHELE MUMANDA	MZANSI	0728553555	carly@nzansi.co.za	

No.	Representative Name	Company Name	Cell Number	Email Address	Signature
51	Neelash Hra	Naidu Consulting	0312656007	neelash.hra@naiduconsulting.com	
52	Genevive Padayachee	Naidu Consulting	0312656007	genevive.padayachee@naiduconsulting.com	
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31302-5W

TWTW FUNCTIONAL UPGRADE:
ETHEKWINI MUNICIPALITY WATER & SANITATION
MINUTES OF CLARIFICATION MEETING
HELD ON THE 09/06/2025 AT 11:00am

No.	ITEM
1.	<u>WELCOME & INTRODUCTION:</u> Devesh Ramghulam (DR) opened the meeting by welcoming all attendees and outlining the purpose of the meeting, which was to clarify matters pertaining to the Tender Documents. The session comprised a review of the Tender Documents, followed by a site visit to the Treatment Works.
2.	DR noted that an attendance register was circulated. DR advised attendees that the meeting was being recorded and no objections were raised.
3.	DR introduced the project team: • Client - eThekweni Municipality – Water Services ○ Represented by: Shalina Ramnund (SR) • Consultant - NC-MSW JV ○ Represented by: Terence Thumbaya (TT), Devesh Ramghulam (DR), Neelesh Hire (NH), Genevive Padayachee (GP) and Don Hodgkinson (DH), Dick Govender (DG)
4.	DR noted the following conduct during the meeting: • Questions will be taken at the end of the explanation of each section of the Tender Document. • Attendees were to ensure their details in the attendance register were legible and correct to ensure accurate distribution of communication. • Once the specific items in the Tender Document have been addressed all present will then proceed to the site where a brief description of the works will be given thereafter the signing of the "Certificate of Attendance."
5.	Tendering Procedures
5.1.	DR elaborated on the following with regard to the Tendering data: • The Tender Document can only be obtained in electronic format via eThekweni Municipality's Website and the eTenders website. • Tenderers are to have a CIDB contractor grading designation of 8 CE (or higher). • Clarifications are to be emailed to Terence.Thumbaya@naiduconsulting.com with Devesh.Ramghulam@naiduconsulting.com cc'd, by 19 June 2025. Responses to all queries will be uploaded by 26 June 2025. • The closing date of the tender is Friday, 4 July 2025 @ 11h00.
5.2.	DR highlighted the documents listed in clause F.1.2. to the tenderers and noted that these documents form part of the tender document.
5.3.	DR noted the tender conditions will follow the Standard Conditions of Tender outlined in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015), published in Government Gazette No. 38960, Board Notice 136, dated 10 July 2015.
5.4.	DR noted that the conditions of contract is the "General Conditions of Contract for Construction Works – 3rd Edition 2015" issued by the South African Institution of Civil Engineering (GCC 2015).



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No.	ITEM																											
5.5.	DR emphasised clause F.2.1.1 and F2.1.2 which indicates that if the Tenderer does not comply with the eligibility criteria the Tenderer will not be eligible to submit tenders for this Contract.																											
5.6.	DR noted that according to clause F.2.1.2 only those Tenderers who are registered with the Construction Industry Development Board (CIDB) with a Contractor-grading of 8CE or higher, as defined in the Regulations of the Construction Industry Development Board, are eligible to submit Tenders for this Contract.																											
5.7.	DR emphasised clause F.2.7 which indicates that all Tenderers must sign the attendance register.																											
5.8.	DR stated that according to clause F.2.13 only original Tender offers must be submitted and must be submitted at 166 K.E Masinga Road and must be placed in the tender box placed on the ground floor. DR further added that an electronic submission is also required via the clients SSS system. Tenderers are to ensure that registration on the SSS system is completed in advance.																											
5.9.	DR noted that if necessary, addenda may be issued, which may amend or amplify the tender documents.																											
6.	Evaluation of Tender Offers																											
6.1.	DR emphasised the tender evaluation procedure including Eligibility, Functionality and Preference Point System (Clause F.3.11). DR added that the tenderers are to take note of the scoring related to Preference Points.																											
7.	Functionality																											
7.1.	DR provided an overview of the Tender Functionality Specification (T1.2.3.5) and stipulated that the functionality criteria is stipulated as per the table below. <table><tr><th colspan="2">Functionality Criteria / Sub Criteria</th><th>Maximum Points Score</th></tr><tr><td colspan="2">Tenderer's Experience</td><td>30</td></tr><tr><td rowspan="7">Project Organogram and Experience of Key Staff</td><td>Site Agent</td><td>10</td></tr><tr><td>Civil/Structural Foremen</td><td>10</td></tr><tr><td>Mechanical Lead Engineer</td><td>10</td></tr><tr><td>Mechanical Superintendent</td><td>5</td></tr><tr><td>Electrical Lead Engineer</td><td>10</td></tr><tr><td>Electrical Superintendent</td><td>5</td></tr><tr><td>Instrumentation Lead Engineer</td><td>10</td></tr><tr><td colspan="2">Preliminary Programme & Construction Methodology</td><td>10</td></tr><tr><td colspan="2">Maximum possible score for Functionality (M_f)</td><td>100</td></tr></table> The minimum number of evaluation points for Functionality is 70. Only those tenderers who achieve the minimum number of Functionality evaluation points (or greater) will be eligible to have their tenders further evaluated.	Functionality Criteria / Sub Criteria		Maximum Points Score	Tenderer's Experience		30	Project Organogram and Experience of Key Staff	Site Agent	10	Civil/Structural Foremen	10	Mechanical Lead Engineer	10	Mechanical Superintendent	5	Electrical Lead Engineer	10	Electrical Superintendent	5	Instrumentation Lead Engineer	10	Preliminary Programme & Construction Methodology		10	Maximum possible score for Functionality (M _f)		100
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No.	ITEM
7.2.	DR highlighted the following with respect to the Tenderers Experience to all tenderers: • Projects of a similar nature that will be considered shall be proven experience as the main or lead Contractor in the Construction, Installation and Commissioning of Water Treatment Plants in the last 10 years (Minimum Size: 10Ml/day). • "successfully completed" implies a project has been completed on time and to specification; • "similar nature" implies projects that were of a value of at least 70% of this tender's value, and had a comparable Scope of Work in terms of technical requirements and in the case of key personnel the individual must have acted in an equivalent role;
7.3.	DR highlighted the following with respect to the Tenderers Key Staff to all tenderers: • The Key Staff on this Contract will comprise of a Site Agent, Civil/Structural Foremen, Mechanical Lead Engineer, Mechanical Superintendent, Electrical Lead Engineer, Electrical Superintendent, and Instrumentation Lead Engineer. • The tenderers are to pay particular attention to the requirements in terms of key staff. • CV's provided are to be no more than 4 pages. • The following staff shall be based full-time on site for the entire duration of the Contract: ○ Site Agent ○ Civil/Structural Foremen ○ Mechanical Superintendent ○ Electrical Superintendent • The following key personnel shall be based part-time on site for the entire duration of the Contract: ○ Mechanical Lead Engineer ○ Electrical Lead Engineer ○ Instrumentation Lead Engineer • Should any of the key staff members not be available for deployment to this contract upon award, only approved candidates with similar or better credentials will be considered by the Employer.
7.4.	DR emphasised that the Preliminary Programme and Construction Methodology should incorporate the details provided in the project specifications, particular specifications, and drawings.
7.5.	DR highlighted the following with respect to the Preliminary Programme and Construction Methodology to all tenderers: • The programme is to be legible and easily interpreted. • The gantt chart is not to be printed across numerous pages. • The tasks and predecessors are to be clearly indicated in the programme.
7.6.	DR further highlighted Clause T1.2.3.6, which states that the awarding of the contract is subject to the availability of budget. SR stated that the Client will endeavour to progress with the project however this will be subject to the availability of budget.



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No.	ITEM
8.	Returnable Schedules
8.1.	DR stated that all Returnables are to be clearly filled in and are a compulsory requirement. DR elaborated on the following with respect to T2.2: - The Experience of the Tenderer schedule shall be completed in full, adhering strictly to the format provided in the Tender Document. - Curriculum Vitae (CVs) for all proposed personnel shall be submitted in the prescribed format and shall not exceed four (4) pages in length. - The Construction Programme shall clearly define the full scope of works and associated methodology in accordance with the project requirements and specifications.
8.2.	DR noted that the Certificate of Attendance at Clarification Meeting has to be completed and signed at the clarification meeting on site.
9.	Agreements and Contract Data
9.1.	DR noted that all Tenderers are to complete the Form of Offer and Acceptance and be signed by an authorised person. The tender will be null and void if the form of offer is not filled in and signed.
9.2.	DR noted the time for achieving Practical Completion, from the Commencement Date is 390 Calendar Days, including 90-day Trial Operation Period. The special non-working days as stated in 5.8.1 of Contract Data are excluded from the above time for achieving Practical Completion.
9.3.	DR highlighted Clause 4.11.1, which stipulates that, in the event any key personnel are unavailable at the time of contract award, only replacements possessing equal or superior qualifications shall be permitted, subject to the prior approval of the Employer's Agent's Representative. All supporting CVs shall be submitted for review and approval.
9.4.	DR referred to Clause 5.4.2 and advised that site access shall not be granted exclusively to the Contractor. Access will be provided by the Employer for the execution of construction and commissioning activities, including the Trial Operation Period. Access shall be shared and must be coordinated with the Employer to ensure that ongoing operations of the treatment works are not disrupted.
9.5.	NH noted the provisions under Clause 5.12.2.2 regarding rain delays. He further confirmed that the contract includes the installation of a rain gauge on-site, and that rainfall data will be monitored and recorded throughout the construction period.
9.6.	DR drew attention to Clause 5.13.1, which prescribes that penalties for delays in the completion of the Works shall be levied at a rate of R40,000.00 per calendar day.
10.	Contract Participation Goals
10.1.	DR noted that Tenderers are required to achieve at least 30% Contract Participation Goals (CPG) of the value of goods, services and Works paid to one or more targeted enterprises to comply with eThekweni Municipality BBBEE policy initiative. A Project Steering Committee (PSC) will be formed to facilitate the CPG component of the works. DR highlighted that tenderers are to take note of C1.2.3.3.
10.2.	SR highlighted that Ward based CPG is encouraged on this Contract.



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No.	ITEM
11.	Scope of Works
11.1.	DR highlighted the main project objective is to restore the TWTW to full operational capacity through multiple improvements, refurbishments, and upgrades (where required) to ensure downstream reservoirs are adequately supplied with potable water. <u>New Head of Works</u> • Isolating valve • Flow metering • Flow rate control • Automated screening • A manual screen bypass that enables maintenance of the automated screen and additionally provides an emergency overflow in the event of a malfunction of the automated screen • Backup flow measurement at V-notch weir • Automated coagulant dosing facility with gravity flash mixing immediately upstream of the flocculation tanks • Pre-chlorination dosing facility • Turbidity, pH, and conductivity monitoring <u>New Dual Flocculation Channels</u> • Construction of new dual flocculation channels, each equipped with 4 mechanical mixers to ensure optimal mixing and flocculation <u>Existing Dortmund Clarifiers (6No)</u> • Refurbishment of the 6 existing Dortmund clarifiers • Automation of sludge removal to enhance efficiency and reliability <u>Existing Rapid Gravity Filters (6No)</u> • Refurbishment of the 6 existing rapid gravity filters • Automation of the backwash sequence to improve operational efficiency • Upstream monitoring of chlorine concentration to ensure water quality <u>Potable Water Reservoir</u> • Incorporation of upstream post-chlorination • Continuous monitoring of: • Water level • Turbidity • pH • Chlorine concentration <u>Backwash Pumps</u> • Installation of backwash pumps in a Duty: Duty: Standby configuration • Installation of blowers in a Duty: Duty: Standby configuration <u>Backwash Recovery System</u> • Implementation of a system to recover and reuse backwash water <u>Sludge Disposal System</u> • Establishment of a system for the efficient disposal of sludge



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No.	ITEM
	<u>Metering</u> • Installation of metering systems to monitor various parameters and ensure accurate data collection <u>Cross Connection</u> • Creation of a cross-connection between the residue disposal system and the backwash recovery system to enhance operational flexibility and efficiency <u>Electrical and Instrumentation</u> • Disconnection and removal of existing equipment, including actuated valves, flow meters, control panels, and transformers • Installation of a new 200kVA 400V transformer and new MCCs for mixers, screens, conveyors, clarifiers, filters, and sludge pumps • New control panels for automatic backwash and air blower sequencing • Automation of chemical and chlorine dosing systems with integration to the new SCADA system • Installation of new electrical actuators for inlet flow control, clarifier de-sludge valves, and filter backwash valves • New ultrasonic flow meters and level sensors for various applications • Relocation and integration of existing telemetry and PLC/HMI systems to the new control room • Comprehensive earthing and lightning protection systems for all new structures and buildings • New site lighting and power installations for the administration building and guard house • Testing, commissioning, and certification of the entire electrical and instrumentation installation <u>Temporary Works</u> The Contractor shall carry out such temporary work, including the necessary access and construction roads, shoring of trenches and excavations etc., as he may require enabling the permanent work to be constructed. He shall allow for the cost of all temporary works, including design and their removal, in his tendered rates. Temporary works are expected to include: • Necessary site access and deviations for traffic where the proposed works will disrupt traffic. • Shoring, dewatering and related temporary works required during excavation of trenches and excavations as required to enable the permanent works to be constructed. The design of the lateral support is to be undertaken by the Contractors Professional Engineer and included in the tendered rate. The design of the lateral support solution will be dependent on the technique used by the contractor to perform the excavation, as well as programmed to fit into the Contractors construction programme. The Contractor is to submit the detailed design for the approval and acceptance of the project geotechnical engineer. • Any temporary support structures required to protect and maintain services. • Any temporary pipe specials and fittings. • The pipework to the clarifiers will have to be temporarily supported during the filling of the structure for the drop test. Backfilling around the structure will only take place after successful completion of the drop test.
11.2.	DR highlighted PS 4.9.4.1, which includes the conditions for Practical Completion and noted that tenderers must take note of these requirements.
11.3.	DR highlighted PS 4.4.8 which states that Shut downs for tie-ins of pipework and the new flocculation structure and new head of works to existing live systems will be complex and require meticulous planning to avoid disruptions. The maximum duration for any shutdown shall not exceed the time stipulated by the Employer, which is 12 hours for this Contract. Additionally, there must be a minimum recovery period of 2 weeks between shutdowns to ensure adequate system recovery and prevent disruption to the Employer's water supply system. The Contractor shall provide 21 days notice prior to any shuts.



TWTW FUNCTIONAL UPGRADE:
ETHEKWINI MUNICIPALITY WATER & SANITATION
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	All planned shutdowns must be approved by the Office of the City Manager and coordinated with Tongaat Hulett. The Contractor must also coordinate with the EWS Bulk and Operations Team to ensure that on-site storage is maintained during the shutdown period.																																							
11.4.	DR highlighted Clause PS 1.4 and stipulated that the Contractor shall be responsible for the preparation and submission of the Equipment List, and for obtaining all required approvals, in full compliance with the provisions of this clause. The Contractor shall ensure that this is undertaken within the timeframes specified in the Document.																																							
11.5.	DR highlighted the project Particular Specifications listed in C3.4.2 C3.4.2: PROJECT PARTICULAR SPECIFICATIONS <table><tr><th>ITEM #</th><th>SPEC REF</th><th>PARTICULAR SPECIFICATION DESCRIPTION</th></tr><tr><td>C3.4.2.1</td><td>PWW</td><td>WATERWORKS EQUIPMENT</td></tr><tr><td>C3.4.2.2</td><td>PSWPE</td><td>PUMPING EQUIPMENT</td></tr><tr><td>C3.4.2.3</td><td>PSECI</td><td>ELECTRICAL, CONTROL & INSTRUMENTATION</td></tr><tr><td>C3.4.2.4</td><td>PSACT</td><td>ELECTRIC ACTUATORS</td></tr><tr><td>C3.4.2.5</td><td>PSVS</td><td>VALVES</td></tr><tr><td>C3.4.2.6</td><td>PSWM</td><td>METERS</td></tr><tr><td>C3.4.2.7</td><td>PABR</td><td>BRICKWORK</td></tr><tr><td>C3.4.2.8</td><td>PSCLR</td><td>COLOUR CODING</td></tr><tr><td>C3.4.2.9</td><td>PSSOP</td><td>STANDARD OPERATING PROCEDURES</td></tr><tr><td>C3.4.2.10</td><td>PSCOM</td><td>COMMISSIONING</td></tr><tr><td>C3.4.2.11</td><td>PSOM</td><td>OPERATIONAL AND MAINTENANCE MANUALS</td></tr><tr><td>C3.4.2.12</td><td>PA C</td><td>PARTICULAR SPECIFICATIONS FOR CORROSION PROTECTION OF STEEL PIPELINES (PSL3.9 SABS 1200)</td></tr></table> DR further noted that the tenderers are to pay attention to the commissioning requirements as this has been defined in the Particular Specification PSCOM and key milestones that must be incorporated into the tender programme. DR noted that the chlorine installation will be classified as a Major Hazard Installation (MHI) and tenderers are to note associated requirements for this.	ITEM #	SPEC REF	PARTICULAR SPECIFICATION DESCRIPTION	C3.4.2.1	PWW	WATERWORKS EQUIPMENT	C3.4.2.2	PSWPE	PUMPING EQUIPMENT	C3.4.2.3	PSECI	ELECTRICAL, CONTROL & INSTRUMENTATION	C3.4.2.4	PSACT	ELECTRIC ACTUATORS	C3.4.2.5	PSVS	VALVES	C3.4.2.6	PSWM	METERS	C3.4.2.7	PABR	BRICKWORK	C3.4.2.8	PSCLR	COLOUR CODING	C3.4.2.9	PSSOP	STANDARD OPERATING PROCEDURES	C3.4.2.10	PSCOM	COMMISSIONING	C3.4.2.11	PSOM	OPERATIONAL AND MAINTENANCE MANUALS	C3.4.2.12	PA C	PARTICULAR SPECIFICATIONS FOR CORROSION PROTECTION OF STEEL PIPELINES (PSL3.9 SABS 1200)
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11.6.	DH provided further technical information as follows: - A provisional sum has been allocated for the design and installation of the tie-in works to the existing Tongaat Hulet Pipeline includint an isolating valve, and control valve. This approach is intended to minimise the duration and impact of planned shutdowns. - Initial connccepts for the tie-ins to the raw water pipeline have been provided by the Employer. - The use of long-radius bends (radius equal to three times the diameter) upstream of the auto-screen has been stipulated.																																							



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	- The raw water screen shall fully comply with the Employer's Technical Specifications. In particular, submerged screens shall be equipped with an automatic turnaround mechanism that operates without sprockets, as the presence of fibrous sugarcane waste in the influent water has been observed to cause clogging in sprocket-driven systems. - The screen system shall include integrated instrumentation—such as head loss measurement devices—to support operational monitoring. Due to extended manufacturing lead times, early procurement of this equipment is critical. - The flocculation system constitutes the only new treatment unit within the scope of works and is designed to provide an approximate hydraulic retention time of 20 minutes under normal operating conditions, with both flocculation channels in service. The system has been configured to allow for continued operation through a single channel during maintenance activities, albeit at reduced treatment efficiency. The mixers specified for this unit are vertical shaft, single-impeller, variable-speed devices, selected to promote effective floc formation and process stability. The tie-in to the existing inlet works has been engineered with a gradual, smooth transition—avoiding sharp directional changes—in order to preserve floc structure and minimise hydraulic disturbance. - With respect to the clarifiers, the existing asbestos cement launder pipes shall be removed in full compliance with all applicable health, safety, and environmental regulations. These shall be replaced with V-notch channels, which offer improved operability and ease of maintenance. This design upgrade is essential to ensure the continued performance of the treatment process, enhance operational safety, and achieve regulatory compliance.
12.	General and Questions
12.1.	Icon – Graham Croucamp (GC): <u>Question:</u> When will the Equipment lists be required? <u>Response:</u> DR & NH confirmed that the Contractor shall submit the Equipment List to the Employer for acceptance and the Employer's Agent for approval within 30 days of the contract commencement (PS 1.4.2). DR stated that all timeframes are specified in PS 1.4. DR further noted that this document is critical to track all approvals and ordering of equipment. <u>Question:</u> What is the minimum duration for responses from the Employers Agent regarding Technical Review and Approval specifically to RFIs <u>Response:</u> NH responded stating that more detailed timeframes will be discussed with the awarded tenderer as this will be dependant on several factors related to the RFI or submission provided by the Contractor. Stefanutti Stocks – Amal Deodutt (AD) Queries: <u>Question:</u> Are there accommodations for a site camp including access to utilities? <u>Response:</u> DR & SR responded stating a site camp has been accommodated, with different locality options and can be coordinated with Tongaat Hulett to utilize their land subject to an agreement in place.
13.	Closure
13.1.	The Clarification Meeting was concluded at 12:30 PM.