
TRANSNET SOC LIMITED

TENDER NUMBER: TNPA/2025/02/0002/89478/RFP

ADDENDUM NO. 02

DATED: 31 August 2026

The following information is furnished in addition to, in amplification and substitution of, matters contained in the tender documents issued in respect of the above-mentioned work.

1. Part T1.1 Tender Notice and Invitation

- The tender closing date has been extended from **18 September 2026 at 16:00** to **28 September 2026 at 16:00**.

2. Part C2.2 Bill of Quantities

- The Pricing schedule has been updated and has been amended as follows:

Old Information		New Information
CIDB BUILD TAB		CIDB BUILD TAB
Item	Description	
1.4	Total Enterprise Development (Items 1.1–1.3)	Line item has been deleted from the BoQ and amount moved to "Final Summary" tab
2	Contract Participation Goal (CPG)	Line item has been deleted from the BoQ
FINAL SUMMARY TAB		
Enterprise Development amount = R0		Enterprise Development amount = R270 000,00

- The BoQ in both pdf and excel formats has been attached herewith as Annexure A.

3. GENERAL

All other terms and conditions remain unchanged.

This addendum must be signed and submitted with your tender.

Prepared By: 
Sindisiwe Mweli
Date: 31 August 2026

Approved By: 
Michael Hogg
Date: 31 August 2026

FROM: _____

DATE: _____

TENDER NUMBER: TNPA/2025/02/0002/89478/RFP

SUPPLY AND INSTALLATION OF SMART WATER AND ELECTRICITY METERS WITH A SOFTWARE SOLUTION (UTILITIES MANAGEMENT) ACROSS THE EIGHT PORTS.

Dear Sir / Madam

Receipt of **Addendum No. 02** dated **31 August 2026** is hereby acknowledged.

ANNEXURE A

SUMMARY		
BILL	DESCRIPTION	AMOUNT R
	RICHARDS BAY	
	DURBAN	
	EAST LONDON	
	NGQURA	
	PORT ELIZABETH	
	MOSSEL BAY	
	CAPE TOWN	
	SALDANHA	
	ENTERPRISE DEVELOPMENT	270 000,00
	SUB -TOTAL 1	
	CIDB B.U.I.L.D PROGRAMME	
	CIDB CONTRACT SKILLS DEVELOPMENT GOALS (CSDG) (0.25% FACTOR X SUB TOTAL 1)	
	SUB -TOTAL 2	
	ALLOW THE SUM OF 0.2% OF SUB TOTAL 2 FOR THE CIDB BUILD FEE	
	NET TOTAL OF TENDER CARRIED FORWARD TO FORM OF OFFER EXCL.	R
Note: Tenderers must incorporate the B.U.I.L.D Participation Fee of 0.2%. Transnet will withhold this percentage and it will be paid directly to CIDB as per the below: "In terms of section 23 (3) of the CIDB Act, Transnet must pay to the CIDB a prescribed percentage of 0.2% of the total tender value..."		

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
1	Enterprise Development (CIDB B.U.I.L.D PROGRAM) Indirect Targeting for Enterprise Development through Construction Works Contracts, Gazette Notice No.36190 of 25 February 2013 (a) Enterprise Development of Targeted Enterprise or JV partners				
1.1	(a.1) Needs Analysis and Enterprise Development Plan per Targeted Enterprise (An amount of R5000 per region)	Item	3	R 5 000,00	R 15 000,00
1.2	(a.2) Monitoring and Interim Reporting per Targeted Enterprise	Per Quarter	12	R 20 000,00	R 240 000,00
1.3	(a.3) Project Completion Report per Targeted Enterprise	Item	3	R 5 000,00	R 15 000,00
	CARRIED FORWARD TO FINAL SUMMARY				R 270 000,00

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
A	PORT OF RICHARDS BAY				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valuated and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
1	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	<u>Facilities for the Engineer</u>				
2.1	Survey assistants and materials	Month	11		
	<u>Facilities for the Contractor</u>				
2.2	Offices and storage sheds	Month	11		
2.3	Ablution and latrine facilities	Month	11		
2.4	Tools and equipment	Month	11		
2.5	Water supplies, electric power and communications	Month	11		
2.6	Dealing with water (Sub-clause 5.5)	Month	11		
2.7	Access (Sub-clause 5.8)	Month	11		
2.8	Plant	Month	11		
	Supervision				
2.9	Supervision for duration of construction	Month	11		
	Other time-related obligations				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	11		
2.11	Compliance to Environmental Management Plan	Month	11		
	CARRIED FORWARD TO SUMMARY				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
C	PORT OF RICHARDS BAY				
	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	12500		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
	METER No. 01 -Harbour Main Replacement of the meter including associated components, Meter size: 300mm, existing pipe material is HDPE and the pipe size: 320mm				
2.1	Decommission and remove the existing above installation.	No.	1		
2.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
2.3	Supply and install a 300mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
2.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
2.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
2.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
2.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
2.8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 02 - Bayview Main Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 180mm				
3.1	Decommission and remove the existing above installation.	No.	1		
3.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
3.3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
3.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
3.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
3.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
3.8	Test and commission the installation	No.	1		
	METER No. 03 - Die Duine Replacement of the meter including associated components, Meter size: 250mm, existing pipe material is HDPE and the pipe size: 280mm				
4.1	Decommission and remove the existing above installation.	No.	1		
4.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
4.3	Supply and install a 250mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
4.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
4.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
4.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
4.8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 04 - Government House Replacement of the meter including associated components Meter size: 100mm, existing pipe material is HDPE and the pipe size: 110mm				
5.1	Decommission and remove the existing above installation.	No.	1		
5.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
5.3	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
5.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
5.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
5.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
5.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
5.8	Test and commission the installation	No.	1		
	METER No. 05 -Water Gantry Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
6.1	Decommission and remove the existing above installation.	No.	1		
6.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
6.3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
6.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
6.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
6.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
6.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
6.8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 06 -Silver Ocean: Main Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 200mm				
7,1	Decommission and remove the existing above installation.	No.	1		
7,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
7,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
7,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
7,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
7,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
7,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
7,6	Test and commission the installation	No.	1		
	METER No. 07 - Newark Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 200mm				
8,1	Decommission and remove the existing above installation.	No.	1		
8,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
8,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
8,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
8,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
8,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
8,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
8,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 08 - Action Cricket Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 170mm				
9,1	Decommission and remove the existing above installation.	No.	1		
9,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
9,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
9,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
9,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
9,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
9,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
9,8	Test and commission the installation	No.	1		
	METER No. 09 - Tidal Gates (Two Meters) Replacement of the meter including associated components, Meter size: 250mm, existing pipe material is HDPE and the pipe size: 270mm				
10,1	Decommission and remove the existing above installation.	No.	1		
10,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
10,3	Supply and install a 250mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
10,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
10,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
10,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
10,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
10,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 10 -Checmical Berth Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 160mm				
11,1	Decommission and remove the existing above installation.	No.	1		
11,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
11,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
11,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
11,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
11,6	Register the meter on both the billing server and the new Utility Management System with apprioptiate tagging	No.	1		
11,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
11,8	Test and commision the installation	No.	1		
	METER No. 11 - 300 Series Replacement of the meter including associated components, Meter size: 200mm, existing pipe material is HDPE and the pipe size: 230mm				
12,1	Decommission and remove the existing above installation.	No.	1		
12,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
12,3	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
12,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
12,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
12,6	Register the meter on both the billing server and the new Utility Management System with apprioptiate tagging	No.	1		
12,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
12,8	Test and commision the installation	No.	1		
	CARRIED FORWARD				

	PORT OF RICHARDS BAY				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 12 - Baermer Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 150mm				
13,1	Decommission and remove the existing above installation.	No.	1		
13,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
13,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
13,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
13,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
13,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
13,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
13,8	Test and commission the installation	No.	1		
	METER No. 13 - Liquid Pitch Replacement of the meter including associated components, Meter size: 75mm, existing pipe material is HDPE and the pipe size: 90mm				
14,1	Decommission and remove the existing above installation.	No.	1		
14,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
14,3	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
14,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
14,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
14,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
14,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
14,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 14 - Fedmis Main Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 180mm				
15,1	Decommission and remove the existing above installation.	No.	1		
15,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
15,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
15,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
15,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
15,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
15,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
15,8	Test and commission the installation	No.	1		
	METER No. 15 - Fedmis Fire Replacement of the meter including associated components Meter size: 20mm, existing pipe material is HDPE and the pipe size: 22mm				
16,1	Decommission and remove the existing above installation.	No.	1		
16,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
16,3	Supply and install a 20mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
16,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 16 - Shincell Fire Replacement of the meter including associated components Meter size: 50mm, existing pipe material is HDPE and the pipe size: 63mm				
17,1	Decommission and remove the existing above installation.	No.	1		
17,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
17,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
17,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
17,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
17,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
17,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
17,8	Test and commission the installation	No.	1		
	METER No. 17 - Shincell Ring Feed Replacement of the meter including associated components Meter size: 100mm, existing pipe material is HDPE and the pipe size: 110mm				
18,1	Decommission and remove the existing above installation.	No.	1		
18,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
18,3	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
18,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
18,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
18,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
18,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
18,8	Test and commission the installation	No.	1		
	METER No. 18 - Fermentech Replacement of the meter including associated components Meter size: 100mm, existing pipe material is HDPE and the pipe size: 110mm				
19,1	Decommission and remove the existing above installation.	No.	1		
19,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
19,3	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
19,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
19,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
19,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
19,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
19,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 19 - Coaking Coal Replacement of the meter including associated components Meter size: 75mm, existing pipe material is HDPE and the pipe size: 90mm				
20,1	Decommission and remove the existing above installation.	No.	1		
20,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
20,3	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
20,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
20,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
20,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
20,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
20,8	Test and commission the installation	No.	1		
	METER No. 20 - IVS: Administration: Small Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 63mm				
21,1	Decommission and remove the existing above installation.	No.	1		
21,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
21,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
21,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
21,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
21,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
21,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
21,8	Test and commission the installation	No.	1		
	METER No. 21 - IVS: Administration: Large Replacement of the meter including associated components, Meter size: 250mm, existing pipe material is HDPE and the pipe size: 270mm				
22,1	Decommission and remove the existing above installation.	No.	1		
22,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
22,3	Supply and install a 250mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
22,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
22,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
22,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
22,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
22,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 22 - IVS: Gate Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
23,1	Decommission and remove the existing above installation.	No.	1		
23,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
23,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
23,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
23,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
23,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
23,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
23,8	Test and commission the installation	No.	1		
	METER No. 23 - IVS: Fire Main Replacement of the meter including associated components, Meter size: 100mm, existing pipe material is HDPE and the pipe size: 150mm				
24,1	Decommission and remove the existing above installation.	No.	1		
24,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
24,3	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
24,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
24,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
24,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
24,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
24,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 24 - Richards Bay Bunker Terminal Replacement of the meter including associated components, Meter size: 25mm, existing pipe material is HDPE and the pipe size: 35mm				
25,1	Decommission and remove the existing above installation.	No.	1		
25,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
25,3	Supply and install a 25mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
25,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
25,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
25,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
25,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
25,8	Test and commission the installation	No.	1		
	METER No. 25 - RBCT Main (Hydra substation) Replacement of the meter including associated components, Meter size: 200mm, existing pipe material is HDPE and the pipe size: 200mm				
26,1	Decommission and remove the existing above installation.	No.	1		
26,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
26,3	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
26,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
26,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
26,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
26,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
26,8	Test and commission the installation	No.	1		
	METER No. 26 - Carriage & Wagon – Departure Yard Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
27,1	Decommission and remove the existing above installation.	No.	1		
27,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
27,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
27,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
27,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
27,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
27,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
27,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 27 - Shunters Cabin 124 & 138 – Silver Ocean Road Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
28,1	Decommission and remove the existing above installation.	No.	1		
28,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
28,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
28,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
28,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
28,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
28,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
28,8	Test and commission the installation	No.	1		
	METER No. 28 - Shunter's Cabin 139 – Bottom Discharger Replacement of the meter including associated components, Meter size: 20mm, existing pipe material is HDPE and the pipe size: 25mm				
29,1	Decommission and remove the existing above installation.	No.	1		
29,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
29,3	Supply and install a 20mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
29,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
29,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
29,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
29,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
29,8	Test and commission the installation	No.	1		
	METER No. 29 - Shunter's Cabin 229 – Arrivals Yard Replacement of the meter including associated components, Meter size: 20mm, existing pipe material is HDPE and the pipe size: 28mm				
30,1	Decommission and remove the existing above installation.	No.	1		
30,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
30,3	Supply and install a 20mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
30,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
30,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
30,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
30,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
30,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 30 - Shunter's Cabin – CoalLink Replacement of the meter including associated components, Meter size: 20mm, existing pipe material is HDPE and the pipe size: 22mm				
31,1	Decommission and remove the existing above installation.	No.	1		
31,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
31,3	Supply and install a 20mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
31,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
31,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
31,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
31,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
31,8	Test and commission the installation	No.	1		
	METER No. 31 - Shunter's Cabin – Duine Area Replacement of the meter including associated components, Meter size: 20mm, existing pipe material is HDPE and the pipe size: 22mm				
32,1	Decommission and remove the existing above installation.	No.	1		
32,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
32,3	Supply and install a 20mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
32,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
32,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
32,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
32,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
32,8	Test and commission the installation	No.	1		
	METER No. 32 - Carriage and Wagon – Duine Area Replacement of the meter including associated components, Meter size: 100mm, existing pipe material is HDPE and the pipe size: 110mm				
33,1	Decommission and remove the existing above installation.	No.	1		
33,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
33,3	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
33,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
33,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
33,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
33,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
33,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 33 - DBT Storage – Mechanical Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
34,1	Decommission and remove the existing above installation.	No.	1		
34,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
34,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
34,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
34,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
34,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
34,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
34,7	Test and commission the installation	No.	1		
	METER No. 34 - DBT Storage – Electrical Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
35,1	Decommission and remove the existing above installation.	No.	1		
35,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
35,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
35,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
35,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
35,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
35,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
35,8	Test and commission the installation	No.	1		
	METER No. 35 - DBT Storage – Administration Replacement of the meter including associated components, Meter size: 50mm, existing pipe material is HDPE and the pipe size: 50mm				
36,1	Decommission and remove the existing above installation.	No.	1		
36,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
36,3	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
36,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
36,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
36,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
36,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
36,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No.36 - Dry Bulk Terminal Main Meter Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 160mm				
37,1	Decommission and remove the existing above installation.	No.	1		
37,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
37,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
37,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
37,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
37,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
37,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
37,8	Test and commission the installation	No.	1		
	METER No. 37 - DBT – Saxon Road Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 150mm				
38,1	Decommission and remove the existing above installation.	No.	1		
38,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
38,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
38,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
38,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
38,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
38,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
38,8	Test and commission the installation	No.	1		
	METER No. 38 - Mhlathuze Building Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 180mm				
39,1	Decommission and remove the existing above installation.	No.	1		
39,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
39,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
39,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
39,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
39,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
39,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
39,8	Test and commission the installation	No.	1		
	CARRIED FORWARD				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 39 - Office 2279 Replacement of the meter including associated components, Meter size: 100mm, existing pipe material is HDPE and the pipe size: 110mm				
40,1	Decommission and remove the existing above installation.	No.	1		
40,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
40,3	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
40,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
40,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
40,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
40,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
40,8	Test and commission the installation	No.	1		
	METER No. 40 - CoalLink Locomotive Depot Replacement of the meter including associated components, Meter size: 75mm, existing pipe material is HDPE and the pipe size: 90mm				
41,1	Decommission and remove the existing above installation.	No.	1		
41,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
41,3	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
41,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
41,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter reading device and establish connectivity for wireless communication.	No.	1		
41,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
41,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
41,8	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY RCB				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of Energy Meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVarh/MVarh), Apparent energy (kVAh/MVAh) etc.				
1,1	Decommission and remove the existing Electricity Meters in various locations	No.	94		
1,2	Supply, install and configure a new smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.).	No.	94		
1,3	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs	No.	94		
1,4	Test and commission the installation.	No.	94		
C	Replacement of Electricity Meters in various locations (Single Phase)				
2,1	Decommission and remove the existing Electricity Meters in various locations	No.	20		
2,2	Supply, install and configure a new Smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.).	No.	20		
2,3	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs.	No.	20		
2,4	Test and commission the installation.	No.	20		
	CARRIED FORWARD TO SUMMARY RCB				
PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	25000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m ³	4500		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	25000		
1,4	Reinstate existing surface and make good	m ²	3750		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	25		
1,6	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	25		
1,7	Supply and install a 9U swing frame cabinet 900mm deep	No.	10		
1,8	Design and construction of Manholes for fibre	No.	15		
1,9	Supply, install and setup the servers	No.	2		
1,10	Splicing of Fibres	No.	360		
1,11	OTDR Testing (Test and submit line losses)	No.	360		
1,12	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,13	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	1		
1,14	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY RCB				

PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	4		
1,2	Smart automatic energy meter reading devices	No.	28		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY RCB				
PORT OF RICHARDS BAY					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data.	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilites management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP FRP	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation	Sum	1		
1,4	Testing and commissioning of the software side both individually and integrated system	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY RCB				

PORT OF RICHARDS BAY		
	DESCRIPTION	AMOUNT R
	PORT OF RICHARDS BAY	
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PORT OF DURBAN					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF DURBAN				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valued and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
1	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

PORT OF DURBAN					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	Facilities for the Engineer				
2.1	Survey assistants and materials	Month	8		
	Facilities for the Contractor				
2.2	Offices and storage sheds	Month	8		
2.3	Ablution and latrine facilities	Month	8		
2.4	Tools and equipment	Month	8		
2.5	Water supplies, electric power and communications	Month	8		
2.6	Dealing with water (Sub-clause 5.5)	Month	8		
2.7	Access (Sub-clause 5.8)	Month	8		
2.8	Plant	Month	8		
	Supervision				
2.9	Supervision for duration of construction	Month	8		
	Other time-related obligations				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	8		
2.11	Compliance to Environmental Management Plan	Month	8		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF DURBAN				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	CARRIED FORWARD TO SUMMARY DBN				
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of Energy Meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVArh/MVArh), Apparent energy (kVAh/MVAh) etc.				
1.3	Decommission and remove the existing Electricity Meters in various locations	No.	3		
1.4	Re-wire the existing electrical circuits		14		
1.5	Supply, install and configure a new smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.).	No.	52		
1.6	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs	No.	52		
1.7	Test and commission the installation.	No.	52		
	CARRIED FORWARD TO SUMMARY DBN				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	6000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m ³	1080		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	6000		
1,4	Reinstate existing surface and make good	m ²	1800		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	24		
1,6	Supply and install a 9U swing frame cabinet 900mm deep	No.	1		
1,7	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,8	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	1		
1,9	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY DBN				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	4		
1,2	Smart automatic energy meter reading devices	No.	28		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY DBN				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data.	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilites management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP ERP.	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation	Sum	1		
1,4	Testing and commissioning of the software side both individually and integrated system	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY DBN				

PORT OF DURBAN		
	DESCRIPTION	AMOUNT R
	PORT OF DURBAN	
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
C	COMMUNICATION	
D	PROCUREMENT AND SUPPLY OF SPARES	
E	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF EAST LONDON				
	PREAMBLES				
	Fixed preliminary items will be valued and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
1	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	<u>Facilities for the Engineer</u>				
2.1	Survey assistants and materials	Month	11		
	<u>Facilities for the Contractor</u>				
2.2	Offices and storage sheds	Month	11		
2.3	Ablution and latrine facilities	Month	11		
2.4	Tools and equipment	Month	11		
2.5	Water supplies, electric power and communications	Month	11		
2.6	Dealing with water (Sub-clause 5.5)	Month	11		
2.7	Access (Sub-clause 5.8)	Month	11		
2.8	Plant	Month	11		
	Supervision				
2.9	Supervision for duration of construction	Month	11		
	Other time-related obligations				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	11		
2.11	Compliance to Environmental Management Plan	Month	11		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF EAST LONDON				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	6000		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
	METER No. 01 -Orient Beach TNPA Replacement of the meter including associated components, Meter size: 32mm, existing pipe material is HDPE				
2,1	Decommission and remove the existing above installation.	No.	1		
2,2	Supply and install a 32mm water meter compatible with AMR technology, including all necessary couplings, bolts, sealants etc.	No.	1		
2,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
2,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
2,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
2,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
2,7	Test and commission the installation	No.	1		
	METER No. 02 - Orient Beach TNPA Replacement of the meter including associated components, Meter size: 90mm, existing pipe material is HDPE				
3,1	Decommission and remove the existing above installation.	No.	1		
3,2	Supply and install a 90mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
3,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
3,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
3,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
3,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 02 - Bayview Main Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE and the pipe size: 180mm				
3.1	Decommission and remove the existing above installation.	No.	1		
3.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
3.3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
3.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
3.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
3.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
3.8	Test and commission the installation	No.	1		
	METER No. 03 - Die Duine Replacement of the meter including associated components, Meter size: 250mm, existing pipe material is HDPE and the pipe size: 280mm				
4.1	Decommission and remove the existing above installation.	No.	1		
4.2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
4.3	Supply and install a 250mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4.4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
4.5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
4.6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
4.7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
4.8	Test and commission the installation	No.	1		
	METER No. 03 - Buffalo Street Replacement of the meter including associated components, Meter size: 32mm, existing pipe material is HDPE				
4,1	Decommission and remove the existing above installation.	No.	1		
4,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
4,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
4,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
4,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
4,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 04 - Buffalo Street Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE				
5,1	Decommission and remove the existing above installation.	No.	1		
5,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
5,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
5,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
5,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
5,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
5,7	Test and commission the installation	No.	1		
	METER No. 05 - Pontoon Road Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE				
6,1	Decommission and remove the existing above installation.	No.	1		
6,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
6,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
6,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
6,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
6,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
6,7	Test and commission the installation	No.	1		
	METER No. 06 - Old Guard Post near SA navy Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
7,1	Decommission and remove the existing above installation.	No.	1		
7,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
7,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
7,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
7,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
7,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
7,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 07 - Port Captain Replacement of the meter including associated components, Meter size: 32mm, existing pipe material is HDPE				
8,1	Decommission and remove the existing above installation.	No.	1		
8,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
8,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
8,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
8,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
8,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
8,7	Test and commission the installation	No.	1		
	METER No. 08 - Port Captain Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE				
9,1	Decommission and remove the existing above installation.	No.	1		
9,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
9,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
9,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
9,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
9,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
9,7	Test and commission the installation	No.	1		
	METER No. 09 - Latimer's Landing Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
10,1	Decommission and remove the existing above installation.	No.	1		
10,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
10,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
10,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
10,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
10,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
10,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 10 - West Bank near B/R/Y/C Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Asbestos Cement				
11,1	Decommission and remove the existing above installation.	No.	1		
11,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
11,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
11,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
11,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
11,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
11,7	Test and commission the installation	No.	1		
	METER No. 11 - Dale Street Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Asbestos Cement				
12,1	Decommission and remove the existing above installation.	No.	1		
12,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
12,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
12,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
12,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
12,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
12,7	Test and commission the installation	No.	1		
	METER No. 12 - Dale Street TNPA Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Asbestos Cement				
13,1	Decommission and remove the existing above installation.	No.	1		
13,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
13,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
13,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
13,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
13,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
13,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 13 - Strand Street Cabin Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
14,1	Decommission and remove the existing above installation.	No.	1		
14,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
14,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
14,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
14,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
14,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
14,7	Test and commission the installation	No.	1		
	METER No. 14 - Strand Street BCM Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
15,1	Decommission and remove the existing above installation.	No.	1		
15,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
15,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
15,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
15,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
15,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
15,7	Test and commission the installation	No.	1		
	METER No. 15 - Strand Street Replacement of the meter including associated components, Meter size: 32mm, existing pipe material is Galvanised Iron				
16,1	Decommission and remove the existing above installation.	No.	1		
16,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
16,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 16 - Strand Street Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
17,1	Decommission and remove the existing above installation.	No.	1		
17,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
17,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
17,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
17,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
17,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
17,7	Test and commission the installation	No.	1		
	METER No. 17 - Strand Street TNPA Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
18,1	Decommission and remove the existing above installation.	No.	1		
18,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
18,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
18,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
18,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
18,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
18,7	Test and commission the installation	No.	1		
	METER No. 18 - Grey Stones W/B Replacement of the meter including associated components, Meter size: 32mm, existing pipe material is Asbestos Cement				
19,1	Decommission and remove the existing above installation.	No.	1		
19,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
19,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
19,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
19,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
19,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
19,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 19 - EMD Horseshoe Replacement of the meter including associated components, Meter size: 32mm, existing pipe material is Copper				
20,1	Decommission and remove the existing above installation.	No.	1		
20,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
20,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
20,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
20,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
20,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
20,7	Test and commission the installation	No.	1		
	METER No. 15 - Fedmis Fire Replacement of the meter including associated components Meter size: 20mm, existing pipe material is HDPE and the pipe size: 22mm				
16,1	Decommission and remove the existing above installation.	No.	1		
16,2	Supply and install flange stub HDPE to flange stub AC to exterior of the chamber including gaskets, bolts, sealants, etc.	No.	2		
16,3	Supply and install a 20mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
16,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,6	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,7	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,8	Test and commission the installation	No.	1		
	METER No. 20 - EMD Horseshoe Replacement of the meter including associated components, Meter size: 90mm, existing pipe material is Copper				
21,1	Decommission and remove the existing above installation.	No.	1		
21,2	Supply and install a 90mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
21,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
21,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
21,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
21,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
21,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 21 - Old Navy Base Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
22,1	Decommission and remove the existing above installation.	No.	1		
22,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
22,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
22,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
22,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
22,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
22,7	Test and commission the installation	No.	1		
	METER No. 22 - Almega College Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
23,1	Decommission and remove the existing above installation.	No.	1		
23,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
23,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
23,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
23,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
23,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
23,7	Test and commission the installation	No.	1		
	METER No. 23 - Almega College TNPA Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
24,1	Decommission and remove the existing above installation.	No.	1		
24,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
24,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
24,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
24,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
24,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
24,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 24 - Latimer's Complex (Bulk) Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
25,1	Decommission and remove the existing above installation.	No.	1		
25,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
25,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
25,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
25,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
25,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
25,7	Test and commission the installation	No.	1		
	METER No. 25 - Latimer's Complex (Normal) Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
26,1	Decommission and remove the existing above installation.	No.	1		
26,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
26,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
26,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
26,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
26,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
26,7	Test and commission the installation	No.	1		
	METER No. 26 - El Yacht Club, Orient Pier Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE				
27,1	Decommission and remove the existing above installation.	No.	1		
27,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
27,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
27,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
27,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
27,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
27,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 27 - Customs House Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE				
28,1	Decommission and remove the existing above installation.	No.	1		
28,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
28,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
28,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
28,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
28,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
28,7	Test and commission the installation	No.	1		
	METER No. 28 - Latimer's Landing Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
29,1	Decommission and remove the existing above installation.	No.	1		
29,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
29,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
29,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
29,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
29,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
29,7	Test and commission the installation	No.	1		
	METER No. 29 - Shipyard Area Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Asbestos Cement				
30,1	Decommission and remove the existing above installation.	No.	1		
30,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
30,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
30,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
30,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
30,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
30,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 30 - Power Boat Club, MC Arthur Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
31,1	Decommission and remove the existing above installation.	No.	1		
31,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
31,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
31,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
31,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
31,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
31,7	Test and commission the installation	No.	1		
	METER No. 31 - House No. 9 Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
32,1	Decommission and remove the existing above installation.	No.	1		
32,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
32,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
32,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
32,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
32,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
32,7	Test and commission the installation	No.	1		
	METER No. 32 - House No. 8 Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
33,1	Decommission and remove the existing above installation.	No.	1		
33,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
33,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
33,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
33,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
33,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
33,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 33 - Foot Prints Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
34,1	Decommission and remove the existing above installation.	No.	1		
34,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
34,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
34,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
34,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
34,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
34,7	Test and commission the installation	No.	1		
	METER No. 34 - Dept Public Works, Saps Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
35,1	Decommission and remove the existing above installation.	No.	1		
35,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
35,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
35,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
35,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
35,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
35,7	Test and commission the installation	No.	1		
	METER No. 35 - Venue Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
36,1	Decommission and remove the existing above installation.	No.	1		
36,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
36,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
36,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
36,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
36,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
36,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 36 - Car Terminal Complex Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Asbestos Cement				
37,1	Decommission and remove the existing above installation.	No.	1		
37,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
37,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
37,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
37,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
37,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
37,7	Test and commission the installation	No.	1		
	METER No. 37 - Terminal Control Bldg. Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
38,1	Decommission and remove the existing above installation.	No.	1		
38,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
38,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
38,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
38,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
38,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
38,7	Test and commission the installation	No.	1		
	METER No. 38 - Straddle Workshop Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
39,1	Decommission and remove the existing above installation.	No.	1		
39,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
39,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
39,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
39,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
39,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
39,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 39 - Mess/Ablution TPT 4 Quay Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
40,1	Decommission and remove the existing above installation.	No.	1		
40,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
40,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
40,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
40,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
40,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
40,7	Test and commission the installation	No.	1		
	METER No. 40 - TPT Admin Building, 3 Quay Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
41,1	Decommission and remove the existing above installation.	No.	1		
41,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
41,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
41,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
41,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
41,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
41,7	Test and commission the installation	No.	1		
	METER No. 41 - G Shed Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
42,1	Decommission and remove the existing above installation.	No.	1		
42,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
42,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
42,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
42,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
42,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
42,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 42 - Elevator EL&P Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
43,1	Decommission and remove the existing above installation.	No.	1		
43,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
43,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
43,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
43,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
43,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
43,7	Test and commission the installation	No.	1		
	METER No. 43 - Elevator Building Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
44,1	Decommission and remove the existing above installation.	No.	1		
44,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
44,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
44,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
44,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
44,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
44,7	Test and commission the installation	No.	1		
	METER No. 44 - TPT Office (Old CPO), 4 QUAY Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
45,1	Decommission and remove the existing above installation.	No.	1		
45,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
45,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
45,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
45,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
45,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
45,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 45 - TPT & IT & Bills Office 4 Quay Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
46,1	Decommission and remove the existing above installation.	No.	1		
46,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
46,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
46,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
46,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
46,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
46,8	Test and commission the installation	No.	1		
	METER No. 47 - Dry Dock Pump Room Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
48,1	Decommission and remove the existing above installation.	No.	1		
48,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
48,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
48,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
48,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
48,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
48,7	Test and commission the installation	No.	1		
	METER No. 48 - Repair Quay Area Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
49,1	Decommission and remove the existing above installation.	No.	1		
49,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
49,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
49,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
49,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
49,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
49,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 49 - Shop 17 Workshop Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
50,1	Decommission and remove the existing above installation.	No.	1		
50,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
50,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
50,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
50,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
50,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
50,7	Test and commission the installation	No.	1		
	METER No. 50 - Shop 17 M & A Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
51,2	Decommission and remove the existing above installation.	No.	1		
51,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
51,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
51,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
51,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
51,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
51,7	Test and commission the installation	No.	1		
	METER No. 51 - Procurement/Security Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is HDPE				
52,2	Decommission and remove the existing above installation.	No.	1		
52,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
52,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
52,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
52,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
52,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
52,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 52 - MHA Area Replacement of the meter including associated components, Meter size: 150mm, existing pipe material is Galvanised Iron				
53,2	Decommission and remove the existing above installation.	No.	1		
53,3	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
53,4	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
53,5	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
53,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
53,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
53,7	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY EL				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of Energy Meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVARh/MVARh), Apparent energy (kVAh/MVAh) etc.				
1.1	Decommission and remove the existing Electricity Meters in various locations	No.	90		
1.2	Supply, install and configure a new smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.).	No.	90		
1.3	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs	No.	90		
1.4	Test and commission the installation.	No.	90		
	CARRIED FORWARD TO SUMMARY EL				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	12000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m ³	2160		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	12000		
1,4	Reinstate existing surface and make good	m ²	3750		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	15		
1,6	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	15		
1,7	Supply and install a 9U swing frame cabinet 900mm deep	No.	10		
1,8	Design and construction of Manholes for fibre	No.	10		
1,9	Supply, install and setup the severs	No.	2		
1,10	Splicing of Fibres	No.	360		
1,11	OTDR Testing (Test and submit line losses)	No.	360		
1,12	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,13	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	1		
1,14	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY EL				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	5		
1,2	Smart automatic energy meter reading devices	No.	9		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY EL				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data.	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilites management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP FRP	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation	Sum	1		
1,4	Testing and commissioning of the software side both individually and integrated system	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY EL				

PORT OF EAST LONDON		
	DESCRIPTION	AMOUNT
	PORT OF EAST LONDON	
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF NGQURA				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valuated and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
1	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				
PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	<u>Facilities for the Engineer</u>				
2.1	Survey assistants and materials	Month	9		
	Facilities for the Contractor				
2.2	Offices and storage sheds	Month	9		
2.3	Ablution and latrine facilities	Month	9		
2.4	Tools and equipment	Month	9		
2.5	Water supplies, electric power and communications	Month	9		
2.6	Dealing with water (Sub-clause 5.5)	Month	9		
2.7	Access (Sub-clause 5.8)	Month	9		
2.8	Plant	Month	9		
	Supervision				
2.9	Supervision for duration of construction	Month	9		
	Other time-related obligations				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	9		
2.11	Compliance to Environmental Management Plan	Month	9		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF NGQURA				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	5000		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
2	NMBM				
2,1	Decommission and remove the existing water meter.	No.	1		
2,2	Supply and install a new 450 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
2,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
2,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
2,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
2,6	Test and commission the installation	No.	1		
3	Main Ent. Zone 1 (B1)				
3,1	Decommission and remove the existing water meter.	No.	1		
3,2	Supply and install a new 315 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
3,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
3,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
3,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
3,6	Test and commission the installation	No.	1		
4	Main Port Entrance (C1)				
4,1	Decommission and remove the existing water meter.	No.	1		
4,2	Supply and install a new 110 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
4,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
4,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
4,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
4,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
5	Main Port Entrance (C2)				
5,1	Decommission and remove the existing water meter.	No.	1		
5,2	Supply and install a new 110 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
5,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
5,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
5,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
5,6	Test and commission the installation	No.	1		
6	Main Port Entrance (C3)				
6,1	Decommission and remove the existing water meter.	No.	1		
6,2	Supply and install a new 110 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
6,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
6,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
6,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
6,6	Test and commission the installation	No.	1		
7	Joorst Park Offices (D)				
7,1	Decommission and remove the existing water meter.	No.	1		
7,2	Supply and install a new 160 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
7,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
7,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
7,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
7,6	Test and commission the installation	No.	1		
8	NCT Trailer Park (G1)				
8,1	Decommission and remove the existing water meter.	No.	1		
8,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
8,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
8,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
8,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
8,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
9	NCT Entrance (F)				
9,1	Decommission and remove the existing water meter.	No.	1		
9,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
9,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
9,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
9,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
9,6	Test and commission the installation	No.	1		
10	NCT Exit (Sec) – (H)				
10,1	Decommission and remove the existing water meter.	No.	1		
10,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
10,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
10,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
10,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
10,6	Test and commission the installation	No.	1		
11	NCT Entrance (Sec) – (I)				
11,1	Decommission and remove the existing water meter.	No.	1		
11,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
11,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
11,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
11,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
11,6	Test and commission the installation	No.	1		
12	NCT Admin Building (K)				
12,1	Decommission and remove the existing water meter.	No.	1		
12,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
12,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
12,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
12,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
12,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
13	NCT Terminal Supply Nort Rail (L)				
13,1	Decommission and remove the existing water meter.	No.	1		
13,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
13,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
13,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
13,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
13,6	Test and commission the installation	No.	1		
14	NCT Hauler Zone (N)				
14,1	Decommission and remove the existing water meter.	No.	1		
14,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
14,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
14,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
14,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
14,6	Test and commission the installation	No.	1		
15	NCT Workshop (S)				
15,1	Decommission and remove the existing water meter.	No.	1		
15,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
15,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
15,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
15,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
15,6	Test and commission the installation	No.	1		
16	Sand Bypass Main Pump Station (E)				
16,1	Decommission and remove the existing water meter.	No.	1		
16,2	Supply and install a new 63 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
16,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
17	BP1 (M)				
17,1	Decommission and remove the existing water meter.	No.	1		
17,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
17,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
17,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
17,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
17,6	Test and commission the installation	No.	1		
18	BP2 (T)				
18,1	Decommission and remove the existing water meter.	No.	1		
18,2	Supply and install a new 250 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
18,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
18,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
18,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
18,6	Test and commission the installation	No.	1		
19	BP3 (P)				
19,1	Decommission and remove the existing water meter.	No.	1		
19,2	Supply and install a new 160 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
19,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
19,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
19,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
19,6	Test and commission the installation	No.	1		
20	TNPA Admin Building (V)				
20,1	Decommission and remove the existing water meter.	No.	1		
20,2	Supply and install a new 110 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
20,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
20,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
20,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
20,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
21	(U)				
21,1	Decommission and remove the existing water meter.	No.	1		R -
21,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		R -
21,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		R -
21,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		R -
21,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		R -
21,6	Test and commission the installation	No.	1		R -
11,8	Test and commission the installation	No.	1		R -
22	(R)				
22,1	Decommission and remove the existing water meter.	No.	1		
22,2	Supply and install a new 200 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
22,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
22,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
22,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
22,6	Test and commission the installation	No.	1		
23	Port Control (O)				
23,1	Decommission and remove the existing water meter.	No.	1		
23,2	Supply and install a new 110 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
23,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
23,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
23,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
23,6	Test and commission the installation	No.	1		
24	ACB Admin (Q)				
24,1	Decommission and remove the existing water meter.	No.	1		
24,2	Supply and install a new 110 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
24,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
24,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
24,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
24,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
12					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
25	To Be Confirmed				
25,1	Decommission and remove the existing water meter.	No.	1		
25,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
25,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
25,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
25,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
25,6	Test and commission the installation	No.	1		
26	To Be Confirmed				
26,1	Decommission and remove the existing water meter.	No.	1		
26,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
26,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
26,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
26,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
26,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
13					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of Energy Meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVAh/MVAh), Apparent energy (kVAh/MVAh) etc.				
1.3	Decommission and remove the existing Electricity Meters in various locations	No.	3		
1.4	Re-wire the existing electrical circuits		14		
1.5	Supply, install and configure a new smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.).	No.	52		
1.6	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs	No.	52		
1.7	Test and commission the installation.	No.	52		
	CARRIED FORWARD TO SUMMARY NGQURA				
14					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	10000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m3	1800		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	10000		
1,4	Reinstate exsiting surface and make good	m2	3000		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	12		
1,6	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	12		
1,7	Supply and install a 9U swing frame cabinet 900mm deep	No.	8		
1,8	Design and construction of Manholes for fibre	No.	8		
1,9	Supply, install and setup the servers	No.	6		
1,10	Splicing of Fibres	No.	288		
1,11	OTDR Testing (Test and submit line losses)	No.	288		
1,12	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,13	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	3		
1,14	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY NGQURA				
15					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	3		
1,2	Smart automatic energy meter reading devices	No.	3		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY NGQURA				
16					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data.	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilites management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP ERP.	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation	Sum	1		
1,4	Testing and commissioning of the software side both individually and integrated system	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY NGQURA				

PORT OF NGQURA		
	DESCRIPTION	AMOUNT
	PORT OF NGQURA	
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF PORT ELIZABETH				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valuated and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
A	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

	PRELIMINARY AND GENERAL				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
	Operation and maintenance of facilities on the Site for duration of construction				
	<u>Facilities for the Engineer</u>				
2.1	Survey assistants and materials	Month	12		
	<u>Facilities for the Contractor</u>				
2.2	Offices and storage sheds	Month	12		
2.3	Ablution and latrine facilities	Month	12		
2.4	Tools and equipment	Month	12		
2.5	Water supplies, electric power and communications	Month	12		
2.6	Dealing with water (Sub-clause 5.5)	Month	12		
2.7	Access (Sub-clause 5.8)	Month	12		
2.8	Plant	Month	12		
	<u>Other time-related obligations</u>				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	12		
2.11	Compliance to Environmental Management Plan	Month	12		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF PORT ELIZABETH				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	6000		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
2	Procurement: Replacement of the meter including associated components, Meter size: 15mm				
2,1	Decommission and remove the existing water meter.	No.	1		
2,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
2,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
2,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
2,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
2,6	Test and commission the installation	No.	1		
3	Security cabin green street: Replacement of the meter including associated components, Meter size: 15mm				
3,1	Decommission and remove the existing water meter.	No.	1		
3,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
3,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
3,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
3,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
3,6	Test and commission the installation	No.	1		
4	Clinic: Replacement of the meter including associated components, Meter size: 15mm				
4,1	Decommission and remove the existing water meter.	No.	1		
4,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
4,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
4,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
4,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
4,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
5	SHEQ Building TPT: Replacement of the meter including associated components, Meter size: 15mm				
5,1	Decommission and remove the existing water meter.	No.	1		
5,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
5,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
5,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
5,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
5,6	Test and commission the installation	No.	1		
6	VW Office opposite Shed 101: Replacement of the meter including associated components, Meter size: 15mm				
6,1	Decommission and remove the existing water meter.	No.	1		
6,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
6,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
6,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
6,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
6,6	Test and commission the installation	No.	1		
7	Shunters Cabin (TFR): Replacement of the meter including associated components, Meter size: 15mm				
7,1	Decommission and remove the existing water meter.	No.	1		
7,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
7,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
7,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
7,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
7,6	Test and commission the installation	No.	1		
8	Black Impala: Replacement of the meter including associated components, Meter size: 15mm				
8,1	Decommission and remove the existing water meter.	No.	1		
8,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
8,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
8,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
8,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
8,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
9	Rennies Group: Replacement of the meter including associated components, Meter size: 15mm				
9,1	Decommission and remove the existing water meter.	No.	1		
9,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
9,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
9,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
9,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
9,6	Test and commission the installation	No.	1		
10	Greystone Cargo Systems (PTY) LTD: Replacement of the meter including associated components, Meter size: 15 mm				
10,1	Decommission and remove the existing water meter.	No.	1		
10,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
10,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
10,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
10,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
10,6	Test and commission the installation	No.	1		
11	Bidfreight Port Operations (PTY) LTD: Replacement of the meter including associated components, Meter size: 15 mm				
11,1	Decommission and remove the existing water meter.	No.	2		
11,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	2		
11,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
11,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
11,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
11,6	Test and commission the installation	No.	2		
12	J.L Wessels: Replacement of the meter including associated components, Meter size: 15 mm				
12,1	Decommission and remove the existing water meter.	No.	1		
12,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
12,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
12,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
12,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
12,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
13	Commercial Marine: Replacement of the meter including associated components, Meter size: 15 mm				
13,1	Decommission and remove the existing water meter.	No.	1		
13,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
13,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
13,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
13,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
13,6	Test and commission the installation	No.	1		
14	CDC Commercial Divers: Replacement of the meter including associated components, Meter size: 15 mm				
14,1	Decommission and remove the existing water meter.	No.	1		
14,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
14,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
14,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
14,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
14,6	Test and commission the installation	No.	1		
15	Security Foot Bridge: Replacement of the meter including associated components, Meter size: 22 mm				
15,1	Decommission and remove the existing water meter.	No.	1		
15,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
15,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
15,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
15,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
15,6	Test and commission the installation	No.	1		
16	HR Offices/ Building: Replacement of the meter including associated components, Meter size: 22 mm				
16,1	Decommission and remove the existing water meter.	No.	1		
16,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
16,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
17	103 Tower: Replacement of the meter including associated components, Meter size: 22 mm				
17,1	Decommission and remove the existing water meter.	No.	1		
17,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
17,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
17,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
17,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
17,6	Test and commission the installation	No.	1		
18	102 Tower: Replacement of the meter including associated components, Meter size: 22 mm				
18,1	Decommission and remove the existing water meter.	No.	1		
18,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
18,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
18,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
18,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
18,6	Test and commission the installation	No.	1		
19	Security Container Entrance: Replacement of the meter including associated components, Meter size: 22 mm				
19,1	Decommission and remove the existing water meter.	No.	1		
19,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
19,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
19,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
19,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
19,6	Test and commission the installation	No.	1		
20	103 Quay Side: Replacement of the meter including associated components, Meter size: 22 mm				
20,1	Decommission and remove the existing water meter.	No.	1		
20,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
20,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
20,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
20,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
20,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
21	102 Quay Side: Replacement of the meter including associated components, Meter size: 22 mm				
21,1	Decommission and remove the existing water meter.	No.	1		
21,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
21,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
21,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
21,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
21,6	Test and commission the installation	No.	1		
22	Shed 101: Replacement of the meter including associated components, Meter size: 22 mm				
22,1	Decommission and remove the existing water meter.	No.	1		
22,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
22,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
22,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
22,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
22,6	Test and commission the installation	No.	1		
23	Car Terminal Admin Office: Replacement of the meter including associated components, Meter size: 22 mm				
23,1	Decommission and remove the existing water meter.	No.	1		
23,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
23,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
23,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
23,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
23,6	Test and commission the installation	No.	1		
24	Spoornet: Replacement of the meter including associated components, Meter size: 22 mm				
24,1	Decommission and remove the existing water meter.	No.	1		
24,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
24,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
24,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
24,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
24,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
25	Malgas (TFR): Replacement of the meter including associated components, Meter size: 22 mm				
25,1	Decommission and remove the existing water meter.	No.	1		
25,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
25,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
25,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
25,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
25,6	Test and commission the installation	No.	1		
26	National Sea Rescue Institute: Replacement of the meter including associated components, Meter size: 22 mm				
26,1	Decommission and remove the existing water meter.	No.	1		
26,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
26,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
26,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
26,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
26,6	Test and commission the installation	No.	1		
27	Stormfire Trading 11 CC: Replacement of the meter including associated components, Meter size: 22 mm				
27,1	Decommission and remove the existing water meter.	No.	1		
27,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
27,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
27,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
27,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
27,6	Test and commission the installation	No.	1		
28	Tabak: Replacement of the meter including associated components, Meter size: 22 mm				
28,1	Decommission and remove the existing water meter.	No.	1		
28,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
28,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
28,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
28,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
28,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
29	Umsobomvu (No.2): Replacement of the meter including associated components, Meter size: 22 mm				
29,1	Decommission and remove the existing water meter.	No.	1		
29,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
29,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
29,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
29,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
29,6	Test and commission the installation	No.	1		
30	Shell South Africa Marketing (PTY)LTD: Replacement of the meter including associated components, Meter size: 22 mm				
30,1	Decommission and remove the existing water meter.	No.	2		
30,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
30,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	m	8		
30,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
30,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
30,6	Test and commission the installation	No.	1		
31	Shell SA (PTY) LTD Replacement of the meter including associated components, Meter size: 22 mm				
31,1	Decommission and remove the existing water meter.	No.	1		
31,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
31,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
31,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
31,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
31,6	Test and commission the installation	No.	1		
32	Extreme Projects: Replacement of the meter including associated components, Meter size: 22 mm				
32,1	Decommission and remove the existing water meter.	No.	1		
32,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
32,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
32,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
32,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
32,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
33	DS +CL Sgacace Fishing Farming Replacement of the meter including associated components, Meter size: 22 mm				
33,1	Decommission and remove the existing water meter.	No.	1		
33,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
33,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
33,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
33,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
33,6	Test and commission the installation	No.	1		
34	CVC Africa: Replacement of the meter including associated components, Meter size: 22 mm				
34,1	Decommission and remove the existing water meter.	No.	1		
34,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
34,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
34,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
34,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
34,6	Test and commission the installation	No.	1		
35	Toilet TPM Kepli Petroleum Replacement of the meter including associated components, Meter size: 22 mm				
35,1	Decommission and remove the existing water meter.	No.	1		
35,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
35,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
35,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
35,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
35,6	Test and commission the installation	No.	1		
36	Blue Water Fishing: Replacement of the meter including associated components, Meter size: 22 mm				
36,1	Decommission and remove the existing water meter.	No.	1		
36,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
36,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
36,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
36,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
36,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
37	Van Niekerk/ Zandalee: Replacement of the meter including associated components, Meter size: 22 mm				
37,1	Decommission and remove the existing water meter.	No.	1		
37,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
37,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
37,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
37,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
37,6	Test and commission the installation	No.	1		
38	Kepu Petroleum: Replacement of the meter including associated components, Meter size: 22 mm				
38,1	Decommission and remove the existing water meter.	No.	1		
38,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
38,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
38,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
38,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
38,6	Test and commission the installation	No.	1		
39	Algoa Bay Sailing Marina: Replacement of the meter including associated components, Meter size: 22 mm				
39,1	Decommission and remove the existing water meter.	No.	1		
39,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
39,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
39,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
39,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
39,6	Test and commission the installation	No.	1		
40	Albatross Offshore Services (PTY)LTD: Replacement of the meter including associated components, Meter size: 22 mm				
40,1	Decommission and remove the existing water meter.	No.	1		
40,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
40,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
40,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
40,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
40,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
41	Albatross: Replacement of the meter including associated components, Meter size: 22 mm				
41,1	Decommission and remove the existing water meter.	No.	1		
41,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
41,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
41,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
41,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
41,6	Test and commission the installation	No.	1		
42	Rail to Rail – Red Grouwa (No.1): Replacement of the meter including associated components, Meter size: 22 mm				
42,1	Decommission and remove the existing water meter.	No.	1		
42,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
42,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
42,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
42,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
42,6	Test and commission the installation	No.	1		
43	Camanga: Replacement of the meter including associated components, Meter size: 22 mm				
43,1	Decommission and remove the existing water meter.	No.	1		
43,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
43,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
43,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
43,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
43,6	Test and commission the installation	No.	1		
44	Blue Water Fish Traders: Replacement of the meter including associated components, Meter size: 22 mm				
44,1	Decommission and remove the existing water meter.	No.	1		
44,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
44,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
44,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
44,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
44,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
45	Bureau Veritus: Replacement of the meter including associated components, Meter size: 22 mm				
45,1	Decommission and remove the existing water meter.	No.	1		
45,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
45,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
45,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
45,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
45,6	Test and commission the installation	No.	1		
46	Tanker Berth Control Room: Replacement of the meter including associated components, Meter size: 22 mm				
46,1	Decommission and remove the existing water meter.	No.	1		
46,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
46,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
46,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
46,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
46,6	Test and commission the installation	No.	1		
47	Tanker Berth Security Cabin: Replacement of the meter including associated components, Meter size: 22 mm				
47,1	Decommission and remove the existing water meter.	No.	1		
47,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
47,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
47,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
47,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
47,6	Test and commission the installation	No.	1		
48	Rail Buildings (3): Replacement of the meter including associated components, Meter size: 22 mm				
48,1	Decommission and remove the existing water meter.	No.	1		
48,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
48,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
48,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
48,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
48,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
49	Engen Petroleum Limited: Replacement of the meter including associated components, Meter size: 25 mm				
49,1	Decommission and remove the existing water meter.	No.	1		
49,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
49,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
49,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
49,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
49,6	Test and commission the installation	No.	1		
50	Shell South Africa (PTY) LTD: Replacement of the meter including associated components, Meter size: 25 mm				
50,1	Decommission and remove the existing water meter.	No.	1		
50,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
50,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
50,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
50,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
50,6	Test and commission the installation	No.	1		
51	Chevron South Africa (PTY) LTD: Replacement of the meter including associated components, Meter size: 25 mm				
51,1	Decommission and remove the existing water meter.	No.	1		
51,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
51,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
51,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
51,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
51,6	Test and commission the installation	No.	1		
52	Umsobomvu: Replacement of the meter including associated components, Meter size: 25 mm				
52,1	Decommission and remove the existing water meter.	No.	1		
52,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
52,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
52,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
52,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
52,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
53	Finance Building: Replacement of the meter including associated components, Meter size: 32 mm				
53,1	Decommission and remove the existing water meter.	No.	1		
53,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
53,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
53,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
53,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
53,6	Test and commission the installation	No.	1		
54	Bus Depot (Clinic): Replacement of the meter including associated components, Meter size: 32 mm				
54,1	Decommission and remove the existing water meter.	No.	1		
54,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
54,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
54,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
54,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
54,6	Test and commission the installation	No.	1		
55	Shed 12 TPT Ablutions: Replacement of the meter including associated components, Meter size: 32 mm				
55,1	Decommission and remove the existing water meter.	No.	1		
55,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
55,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
55,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
55,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
55,6	Test and commission the installation	No.	1		
56	Shunters T/S Double Storey: Replacement of the meter including associated components, Meter size: 32 mm				
56,1	Decommission and remove the existing water meter.	No.	1		
56,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
56,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
56,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
56,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
56,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
57	Shell South Africa (PTY) LTD: Replacement of the meter including associated components, Meter size: 32 mm				
57,1	Decommission and remove the existing water meter.	No.	1		
57,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
57,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
57,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
57,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
57,6	Test and commission the installation	No.	1		
58	Total Oil SA (PTY) LTD: Replacement of the meter including associated components, Meter size: 32 mm				
58,1	Decommission and remove the existing water meter.	No.	1		
58,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
58,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
58,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
58,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
58,6	Test and commission the installation	No.	1		
59	ABSM Crane: Replacement of the meter including associated components, Meter size: 32 mm				
59,1	Decommission and remove the existing water meter.	No.	1		
59,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
59,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
59,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
59,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
59,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
60	Eyethu Fishing (PTY) LTD: Replacement of the meter including associated components, Meter size: 32 mm				
60,1	Decommission and remove the existing water meter.	No.	1		
60,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
60,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
60,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
60,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
60,6	Test and commission the installation	No.	1		
61	Talhado Fishing Replacement of the meter including associated components, Meter size: 32 mm				
61,1	Decommission and remove the existing water meter.	No.	1		
61,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
61,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
61,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
61,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
61,6	Test and commission the installation	No.	1		
62	Fingcorp 113 CC: Replacement of the meter including associated components, Meter size: 32 mm				
62,1	Decommission and remove the existing water meter.	No.	1		
62,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
62,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
62,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
62,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
62,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
63	Vacant Building 1: Replacement of the meter including associated components, Meter size: 32 mm				
63,1	Decommission and remove the existing water meter.	No.	1		
63,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
63,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
63,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
63,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
63,6	Test and commission the installation	No.	1		
64	Vacant Building 2: Replacement of the meter including associated components, Meter size: 32 mm				
64,1	Decommission and remove the existing water meter.	No.	1		
64,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
64,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
64,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
64,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
64,6	Test and commission the installation	No.	1		
65	Vacant Building 3 Replacement of the meter including associated components, Meter size: 32 mm				
65,1	Decommission and remove the existing water meter.	No.	1		
65,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
65,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
65,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
65,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
65,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				R -

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
66	Vacant Building 4: Replacement of the meter including associated components, Meter size: 32 mm				
66,1	Decommission and remove the existing water meter.	No.	1		
66,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		R -
66,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		R -
66,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		R -
66,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		R -
66,6	Test and commission the installation	No.	1		R -
67	CVC Building (Ablution Block): Replacement of the meter including associated components, Meter size: 32 mm				
67,1	Decommission and remove the existing water meter.	No.	1		
67,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
67,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
67,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
67,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
67,6	Test and commission the installation	No.	1		
68	Ore Berth (Ablution Block): Replacement of the meter including associated components, Meter size: 32 mm				
68,1	Decommission and remove the existing water meter.	No.	1		
68,2	Supply and install a new 32 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
68,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
68,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
68,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
68,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
69	Civil Depot: Replacement of the meter including associated components, Meter size: 40 mm				
69,1	Decommission and remove the existing water meter.	No.	1		
69,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
69,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
69,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
69,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
69,6	Test and commission the installation	No.	1		
70	Business Manager (MPT): Replacement of the meter including associated components, Meter size: 40 mm				
70,1	Decommission and remove the existing water meter.	No.	1		
70,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
70,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
70,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
70,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
70,6	Test and commission the installation	No.	1		
71	ULwandle (Next to Oyster): Replacement of the meter including associated components, Meter size: 40 mm				
71,1	Decommission and remove the existing water meter.	No.	1		
71,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
71,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
71,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
71,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
71,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
72	Live Fish Tanks (East Coast): Replacement of the meter including associated components, Meter size: 40 mm				
72,1	Decommission and remove the existing water meter.	No.	1		
72,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
72,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
72,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
72,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
72,6	Test and commission the installation	No.	1		
73	Department of Public Works: Replacement of the meter including associated components, Meter size: 40 mm				
73,1	Decommission and remove the existing water meter.	No.	1		
73,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
73,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
73,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
73,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
73,6	Test and commission the installation	No.	1		
74	Alvodex CC: Replacement of the meter including associated components, Meter size: 40 mm				
74,1	Decommission and remove the existing water meter.	No.	1		
74,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
74,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
74,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
74,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
74,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
75	Pumpstation House (Seawater): Replacement of the meter including associated components, Meter size: 40 mm				
75,1	Decommission and remove the existing water meter.	No.	1		
75,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
75,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
75,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
75,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
75,6	Test and commission the installation	No.	1		
76	Trade Motto (1): Replacement of the meter including associated components, Meter size: 40 mm				
76,1	Decommission and remove the existing water meter.	No.	1		
76,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
76,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
76,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
76,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
76,6	Test and commission the installation	No.	1		
77	Trade Motto (2): Replacement of the meter including associated components, Meter size: 40 mm				
77,1	Decommission and remove the existing water meter.	No.	1		
77,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
77,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
77,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
77,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
77,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
78	Rail Buildings (1): Replacement of the meter including associated components, Meter size: 40 mm				
78,1	Decommission and remove the existing water meter.	No.	1		
78,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
78,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
78,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
78,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
78,6	Test and commission the installation	No.	1		
79	Rail Buildings (2): Replacement of the meter including associated components, Meter size: 40 mm				
79,1	Decommission and remove the existing water meter.	No.	1		
79,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
79,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
79,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
79,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
79,6	Test and commission the installation	No.	1		
80	Marine Services: Replacement of the meter including associated components, Meter size: 50 mm				
80,1	Decommission and remove the existing water meter.	No.	2		
80,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	2		
80,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
80,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
80,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
80,6	Test and commission the installation	No.	2		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
81	Port Admin Building (Port Authority): Replacement of the meter including associated components, Meter size: 50 mm				
81,1	Decommission and remove the existing water meter.	No.	1		
81,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
81,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
81,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
81,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
81,6	Test and commission the installation	No.	1		
82	Port Control Tower (Port Captain) Replacement of the meter including associated components, Meter size: 50 mm				
82,1	Decommission and remove the existing water meter.	No.	1		
82,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
82,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
82,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
82,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
82,6	Test and commission the installation	No.	1		
83	Minor Building (Offices): Replacement of the meter including associated components, Meter size: 50 mm				
83,1	Decommission and remove the existing water meter.	No.	1		
83,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
83,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
83,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
83,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
83,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
84	Minor Building (Ablutions): Replacement of the meter including associated components, Meter size: 50 mm				
84,1	Decommission and remove the existing water meter.	No.	1		
84,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
84,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
84,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
84,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
84,6	Test and commission the installation	No.	1		
85	TPT Offices: Replacement of the meter including associated components, Meter size: 50 mm				
85,1	Decommission and remove the existing water meter.	No.	1		
85,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
85,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
85,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
85,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
85,6	Test and commission the installation	No.	1		
86	Shell South Africa (PTY) LTD: Replacement of the meter including associated components, Meter size: 50 mm				
86,1	Decommission and remove the existing water meter.	No.	1		
86,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
86,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
86,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
86,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
86,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
87	Talhado Fishing Enterprise (PTY) LTD: Replacement of the meter including associated components, Meter size: 50 mm				
87,1	Decommission and remove the existing water meter.	No.	1		
87,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
87,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
87,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
87,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
87,6	Test and commission the installation	No.	1		
88	P.E Deep Sea Angling Club: Replacement of the meter including associated components, Meter size: 50 mm				
88,1	Decommission and remove the existing water meter.	No.	1		
88,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
88,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
88,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
88,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
88,6	Test and commission the installation	No.	1		
89	Shall South Africa (PTY) LTD: Replacement of the meter including associated components, Meter size: 50 mm				
89,1	Decommission and remove the existing water meter.	No.	1		
89,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
89,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
89,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
89,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
89,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
90	Biblia Harbour Mission: Replacement of the meter including associated components, Meter size: 50 mm				
90,1	Decommission and remove the existing water meter.	No.	1		
90,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
90,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
90,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
90,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
90,6	Test and commission the installation	No.	1		
91	Talhado Fishing: Replacement of the meter including associated components, Meter size: 50 mm				
91,1	Decommission and remove the existing water meter.	No.	1		
91,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
91,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
91,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
91,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
91,6	Test and commission the installation	No.	1		
92	TNPA Lighthouse Services: Replacement of the meter including associated components, Meter size: 50 mm				
92,1	Decommission and remove the existing water meter.	No.	1		
92,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
92,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
92,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
92,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
92,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
93	Plot No.1 (Shop 17) Breakeven: Replacement of the meter including associated components, Meter size: 50 mm				
93,1	Decommission and remove the existing water meter.	No.	1		
93,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
93,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
93,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
93,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
93,6	Test and commission the installation	No.	1		
94	Zwembesi Farm: Replacement of the meter including associated components, Meter size: 50 mm				
94,1	Decommission and remove the existing water meter.	No.	1		
94,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
94,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
94,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
94,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
94,6	Test and commission the installation	No.	1		
95	BPO: Replacement of the meter including associated components, Meter size: 50 mm				
95,1	Decommission and remove the existing water meter.	No.	1		
95,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
95,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
95,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
95,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
95,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
96	Cargo: Replacement of the meter including associated components, Meter size: 50 mm				
96,1	Decommission and remove the existing water meter.	No.	1		
96,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
96,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
96,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
96,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
96,6	Test and commission the installation	No.	1		
97	Ore Berth Control Tower: Replacement of the meter including associated components, Meter size: 75 mm				
97,1	Decommission and remove the existing water meter.	No.	1		
97,2	Supply and install a new 75 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
97,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
97,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
97,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
97,6	Test and commission the installation	No.	1		
98	Eyethu Fishing (PTY) LTD Replacement of the meter including associated components, Meter size: 75 mm				
98,1	Decommission and remove the existing water meter.	No.	1		
98,2	Supply and install a new 75 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
98,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
98,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
98,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
98,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
99	Siyaloba Fishing Academy: Replacement of the meter including associated components, Meter size: 75 mm				
99,1	Decommission and remove the existing water meter.	No.	1		
99,2	Supply and install a new 75 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
99,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
99,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
99,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
99,6	Test and commission the installation	No.	1		
100	FPT Port Leasing: Replacement of the meter including associated components, Meter size: 75 mm				
100,1	Decommission and remove the existing water meter.	No.	1		
100,2	Supply and install a new 75 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
100,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
100,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
100,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
100,6	Test and commission the installation	No.	1		
101	Technical Manager (Shop 17): Replacement of the meter including associated components, Meter size: 100 mm				
101,1	Decommission and remove the existing water meter.	No.	1		
101,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
101,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
101,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
101,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
101,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
102	Technical Manager: Replacement of the meter including associated components, Meter size: 100 mm				
102,1	Decommission and remove the existing water meter.	No.	1		
102,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
102,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
102,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
102,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
102,6	Test and commission the installation	No.	1		
103	Tipplers: Replacement of the meter including associated components, Meter size: 100 mm				
103,1	Decommission and remove the existing water meter.	No.	1		
103,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
103,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
103,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
103,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
103,6	Test and commission the installation	No.	1		
104	Shell South Africa (PTY) LTD: Replacement of the meter including associated components, Meter size: 100 mm				
104,1	Decommission and remove the existing water meter.	No.	1		
104,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
104,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
104,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
104,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
104,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
105	Talhado Fishing Enterprise (PTY) LTD: Replacement of the meter including associated components, Meter size: 100 mm				
105,1	Decommission and remove the existing water meter.	No.	1		
105,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
105,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
105,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
105,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
105,6	Test and commission the installation	No.	1		
106	Oil Sites main Supply: Replacement of the meter including associated components, Meter size: 150 mm				
106,1	Decommission and remove the existing water meter.	No.	1		
106,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
106,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
106,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
106,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
106,6	Test and commission the installation	No.	1		
107	Baakens Main Supply: Replacement of the meter including associated components, Meter size: 150 mm				
107,1	Decommission and remove the existing water meter.	No.	1		
107,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
107,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
107,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
107,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
107,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
108	Jetty Main Supply: Replacement of the meter including associated components, Meter size: 150 mm				
108,1	Decommission and remove the existing water meter.	No.	1		
108,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
108,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
108,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
108,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
108,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY PE				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of Energy Meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVARh/MVARh), Apparent energy (kVAh/MVAh) etc.				
1.3	Decommission and remove the existing Electricity Meters in various locations	No.	108		
1.4	Re-wire the existing electrical circuits		108		
1.5	Supply, install and configure a new smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.).	No.	108		
1.6	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs	No.	108		
1.7	Test and commission the installation.	No.	108		
	CARRIED FORWARD TO SUMMARY PE				
41					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	12000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m ³	2160		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	12000		
1,4	Reinstate existing surface and make good	m ²	3600		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	15		
1,6	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	15		
1,7	Supply, install and configure media converters	No.	6		
1,8	Supply and install a 9U swing frame cabinet 900mm deep	No.	10		
1,9	Design and construction of Manholes for fibre	No.	10		
1,10	Supply, install and setup the servers	No.	2		
1,11	Splicing of Fibres	No.	360		
1,12	OTDR Testing (Test and submit line losses)	No.	360		
1,13	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,14	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	1		
1,15	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD SUMMARY PE				
28					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	12		
1,2	Smart automatic energy meter reading devices	No.	11		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD SUMMARY PE				
27					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
	Metering gateways				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data.	No.	5		
1,2	new Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilities management system. Provide license package. Develop an API and link it to the back end of IPMS and CAP ERP	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation.	Sum	1		
1,4	Testing and commissioning of the software side both individual	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD SUMMARY PE				

PORT OF PORT ELIZABETH		
	DESCRIPTION	AMOUNT R
	PORT OF PORT ELIZABETH	
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF MOSSEL BAY				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valued and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
A	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	Facilities for the Engineer				
2.1	Survey assistants and materials	Month	11		
	Facilities for the Contractor				
2.2	Offices and storage sheds	Month	11		
2.3	Ablution and latrine facilities	Month	11		
2.4	Tools and equipment	Month	11		
2.5	Water supplies, electric power and communications	Month	11		
2.6	Dealing with water (Sub-clause 5.5)	Month	11		
2.7	Access (Sub-clause 5.8)	Month	11		
2.8	Plant	Month	11		
	Supervision				
2.9	Supervision for duration of construction	Month	11		
	Other time-related obligations				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	11		
2.11	Compliance to Environmental Management Plan	Month	11		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF MOSSEL BAY				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	2500		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
	METER No. 01 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
2,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
2,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
2,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
2,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
2,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
2,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
2,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
2,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
2,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
2.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilities Management System Link the meter on both the billing server and the new Utilities Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	
	BROUGHT FORWARD				
	METER No. 02 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
3,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
3,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
3,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
3,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
3,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
3,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
3.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
8					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 03 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
4,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
4,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
4,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
4,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
4,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
4,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
4.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
9					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 04 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
5,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
5,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
5,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
5,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
5,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
5,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
5,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
5,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
5,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
5.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 05 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
6,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
6,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
6,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
6,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
6,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
6,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
6,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
6,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
6,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
6.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 06 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
7,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m³	5		
7,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
7,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
7,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
7,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
7,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
7,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
7,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
7,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
7.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
12					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 07 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
8,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
8,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
8,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
8,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
8,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
8,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
8,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
8,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
8,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
8.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 09 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
10.1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
10.2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
10.3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
10.4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
10.5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
10.6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
10.7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
10.8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
10.9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
10.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 10 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
11,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
11,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
11,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
11,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
11,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
11,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
11,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
11,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
11,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
11.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 11 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
12,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
12,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
12,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
12,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
12,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
12,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
12,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
12,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
12,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
12.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 12 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
13,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
13,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
13,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
13,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
13,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
13,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
13,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
13,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
13,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
13.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER NO. 13 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
14,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
14,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
14,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
14,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
14,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
14,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
14,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
14,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
14,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
14.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 14 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
15,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
15,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
15,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
15,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
15,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary gaskets, bolts, sealants etc.	No.	2		
15,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
15,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
15,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
15,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
15.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 15 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
16,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
16,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
16,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
16,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
16,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
16,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
16.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 16 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
17,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
17,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
17,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
17,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
17,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
17,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
17,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
17,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
17,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
17.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 17 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
18,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
18,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
18,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
18,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
18,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
18,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
18,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
18,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
18,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
18.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 18 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
19,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
19,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
19,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
19,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
19,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
19,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
19,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
19,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
19,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
19.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 19 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
20,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
20,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
20,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
20,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
20,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
20,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
20,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
20,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
20,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
20.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 20 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
21,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
21,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
21,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
21,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
21,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
21,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
21,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
21,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
21,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
21.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 21 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
22,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
22,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
22,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
22,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
22,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
22,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
22,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
22,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
22,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
22.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 22 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
23,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m3	5		
23,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
23,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
23,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
23,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
23,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
23,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
23,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
23,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
23.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 23 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
24,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
24,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
24,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
24,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
24,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
24,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
24,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
24,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
24,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
24.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 24 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
251	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
251,1	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
251,2	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
251,3	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
251,4	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
251,5	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
251,6	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
251,7	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
251,8	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
25.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 25 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
26,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
26,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
26,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
26,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
26,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
26,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
26,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
26,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
26,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
26.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 26 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
27,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
27,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
27,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
27,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
27,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
27,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
27,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
27,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
27,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
27.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 27 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
28,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
28,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
28,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
28,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
28,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
28,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
28,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
28,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
28,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
28.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 28 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
29,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
29,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
29,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
29,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
29,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
29,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
29,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
29,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
29,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
29.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 29 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
30,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
30,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
30,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
30,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
30,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
30,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
30,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
30,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
30,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
30.10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
31	MZR 181 Flames Area				
31,1	Decommission and remove the existing water meter.	No.	1		
31,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
31,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
31,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
31,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
31,6	Test and commission the installation	No.	1		
32	Flames Restaurant				
32,1	Decommission and remove the existing water meter.	No.	1		
32,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
32,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
32,4	Register the meter on both the billing server and the new Utility Mana	No.	1		
32,5	Create an account and link the meter to the account and apply the ap	No.	1		
32,6	Test and commission the installation	No.	1		
33	Car Wash				
33,1	Decommission and remove the existing water meter.	No.	1		
33,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
33,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
33,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
33,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
33,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
34	Station Complex (Check Meter)				
34,1	Decommission and remove the existing water meter.	No.	1		
34,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
34,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
34,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
34,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
34,6	Test and commission the installation	No.	1		
35	Bedding Stores				
35,1	Decommission and remove the existing water meter.	No.	1		
35,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
35,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
35,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
35,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
35,6	Test and commission the installation	No.	1		
36	Station 1				
36,1	Decommission and remove the existing water meter.	No.	1		
36,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
36,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
36,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
36,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
36,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
37	Station 2 Laparon				
37,1	Decommission and remove the existing water meter.	No.	1		
37,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
37,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
37,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
37,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
37,6	Test and commission the installation	No.	1		
38	Old Electrical Workshop				
38,1	Decommission and remove the existing water meter.	No.	1		
38,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
38,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
38,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
38,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
38,6	Test and commission the installation	No.	1		
39	Station Platform				
39,1	Decommission and remove the existing water meter.	No.	1		
39,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
39,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
39,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
39,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
39,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
40	GZR 257 Bridge Bulk (Quay 4)				
40,1	Decommission and remove the existing water meter.	No.	1		
40,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
40,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
40,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
40,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
40,6	Test and commission the installation	No.	1		
41	Recreational Slipway Office				
41,1	Decommission and remove the existing water meter.	No.	1		
41,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
41,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
41,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
41,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
41,6	Test and commission the installation	No.	1		
42	Recreational Brick Building Ablutions TNPA				
42,1	Decommission and remove the existing water meter.	No.	1		
42,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
42,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
42,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
42,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
42,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
43	Mobile Toilets TNPA				
43,1	Decommission and remove the existing water meter.	No.	1		
43,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
43,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
43,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
43,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
43,6	Test and commission the installation	No.	1		
44	WAG/Steakhouse				
44,1	Decommission and remove the existing water meter.	No.	1		
44,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
44,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
44,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
44,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
44,6	Test and commission the installation	No.	1		
45	KAAI 4				
45,1	Decommission and remove the existing water meter.	No.	1		
45,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
45,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
45,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
45,5	Create an account and link the meter to the account and apply the ap	No.	1		
45,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
46	London Bus/Oyster Bar				
46,1	Decommission and remove the existing water meter.	No.	1		
46,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
46,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
46,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
46,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
46,6	Test and commission the installation	No.	1		
47	Waterfront 1				
47,1	Decommission and remove the existing water meter.	No.	1		
47,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
47,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
47,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
47,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
47,6	Test and commission the installation	No.	1		
48	Waterfront 2				
48,1	Decommission and remove the existing water meter.	No.	1		
48,2	Supply and install a new 22 mm water meter compatible with AMR technology	No.	1		
48,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
48,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
48,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
48,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
49	Romonza				
49,1	Decommission and remove the existing water meter.	No.	1		
49,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
49,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
49,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
49,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
49,6	Test and commission the installation	No.	1		
50	Minoli				
50,1	Decommission and remove the existing water meter.	No.	1		
50,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
50,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
50,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
50,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
50,6	Test and commission the installation	No.	1		
51	Gate No 2				
51,1	Decommission and remove the existing water meter.	No.	1		
51,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
51,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
51,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
51,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
51,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
52	Good Shed				
52,1	Decommission and remove the existing water meter.	No.	1		
52,2	Supply and install a new 80 mm water meter compatible with AMR technology	No.	1		
52,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
52,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
52,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
52,6	Test and commission the installation	No.	1		
53	F/H Supply Bulk meter (Station Platform)				
53,1	Decommission and remove the existing water meter.	No.	1		
53,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
53,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
53,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
53,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
53,6	Test and commission the installation	No.	1		
54	Check Meter VJ				
54,1	Decommission and remove the existing water meter.	No.	1		
54,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
54,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
54,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
54,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
54,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
55	VJ Security Guardhouse				
55,1	Decommission and remove the existing water meter.	No.	1		
55,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
55,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
55,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
55,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
55,6	Test and commission the installation	No.	1		
56	TNPA Marine Supply Point Artic Turn				
56,1	Decommission and remove the existing water meter.	No.	1		
56,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
56,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
56,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
56,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
56,6	Test and commission the installation	No.	1		
57	TNPA Marine Supply Point Snipe				
57,1	Decommission and remove the existing water meter.	No.	1		
57,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
57,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
57,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
57,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
57,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
58	Smit Amandla				
58,1	Decommission and remove the existing water meter.	No.	1		
58,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
58,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
58,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
58,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
58,6	Test and commission the installation	No.	1		
59	VJ Quay Side Supply Pnt #1				
59,1	Decommission and remove the existing water meter.	No.	1		
59,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
59,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
59,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
59,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
59,6	Test and commission the installation	No.	1		
60	VJ Quay Side Supply Pnt #2				
60,1	Decommission and remove the existing water meter.	No.	1		
60,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
60,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
60,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
60,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
60,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
61	VJ Quay Side Supply Pnt #3				
61,1	Decommission and remove the existing water meter.	No.	1		
61,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
61,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
61,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
61,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
61,6	Test and commission the installation	No.	1		
62	VJ Quay Side Supply Pnt #4				
62,1	Decommission and remove the existing water meter.	No.	1		
62,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
62,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
62,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
62,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
62,6	Test and commission the installation	No.	1		
63	Sliding Door				
63,1	Decommission and remove the existing water meter.	No.	1		
63,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
63,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
63,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
63,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
63,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
64	Store Racks				
64,1	Decommission and remove the existing water meter.	No.	1		
64,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
64,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
64,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
64,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
64,6	Test and commission the installation	No.	1		
65	Wash Bay				
65,1	Decommission and remove the existing water meter.	No.	1		
65,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
65,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
65,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
65,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
65,6	Test and commission the installation	No.	1		
66	Tsisa yama				
66,1	Decommission and remove the existing water meter.	No.	1		
66,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
66,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
66,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
66,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
66,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
67	Sea Gypsey				
67,1	Decommission and remove the existing water meter.	No.	1		
67,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
67,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
67,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
67,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
67,6	Test and commission the installation	No.	1		
68	Biblia				
68,1	Decommission and remove the existing water meter.	No.	1		
68,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
68,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
68,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
68,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
68,6	Test and commission the installation	No.	1		
69	Gate 1 Guard House				
69,1	Decommission and remove the existing water meter.	No.	1		
69,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
69,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
69,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
69,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
69,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
70	Border Management Agency				
70,1	Decommission and remove the existing water meter.	No.	1		
70,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
70,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
70,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
70,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
70,6	Test and commission the installation	No.	1		
71	Luna Moon				
71,1	Decommission and remove the existing water meter.	No.	1		
71,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
71,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
71,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
71,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
71,6	Test and commission the installation	No.	1		
72	PetroSA Office				
72,1	Decommission and remove the existing water meter.	No.	1		
72,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
72,30	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
72,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
72,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
72,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
73	PetroSA Mess & Ablution				
73,1	Decommission and remove the existing water meter.	No.	1		
73,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
73,3	Supply, install, mount and configure a smart IP68 automatic data logger	No.	1		
73,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
73,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
73,6	Test and commission the installation	No.	1		
74	Meg Plant (Tanks)				
74,1	Decommission and remove the existing water meter.	No.	1		
74,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
74,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
74,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
74,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
74,6	Test and commission the installation	No.	1		
75	Long Shed (PetroSA) Q4				
75,1	Decommission and remove the existing water meter.	No.	1		
75,2	Supply and install a new 90 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
75,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
75,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
75,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
75,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
76	Quay Side Point 1 (Charlie)				
76,1	Decommission and remove the existing water meter.	No.	1		
76,2	Supply and install a new 90 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
76,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
76,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
76,5	Create an account and link the meter to the account and apply the ap	No.	1		
76,6	Test and commission the installation	No.	1		
77	Quay Side Point 2 (Bravo)				
77,1	Decommission and remove the existing water meter.	No.	1		
77,2	Supply and install a new 90 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
77,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
77,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
77,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
77,6	Test and commission the installation	No.	1		
78	Quay Side Point 3 (Alpha)				
78,1	Decommission and remove the existing water meter.	No.	1		
78,2	Supply and install a new 90 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
78,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
78,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
78,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
78,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
79	UZR 752 Viking Area				
79,1	Decommission and remove the existing water meter.	No.	1		
79,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
79,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
79,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
79,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
79,6	Test and commission the installation	No.	1		
80	Blue Shed				
80,1	Decommission and remove the existing water meter.	No.	1		
80,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
80,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
80,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
80,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
80,6	Test and commission the installation	No.	1		
81	Afro Fishing 2 (Old I & J Site) On quay side				
81,1	Decommission and remove the existing water meter.	No.	1		
81,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
81,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
81,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
81,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
81,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
82	Viking Fishing				
82,1	Decommission and remove the existing water meter.	No.	1		
82,20	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
82,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
82,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
82,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
82,6	Test and commission the installation	No.	1		
83	Gate No.3 TNPA				
83,1	Decommission and remove the existing water meter.	No.	1		
83,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
83,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
83,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
83,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
83,6	Test and commission the installation	No.	1		
84	Kepu Site				
84,1	Decommission and remove the existing water meter.	No.	1		
84,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
84,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
84,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
84,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
84,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
85	Quay No.3 TNPA Supply Point				
85,1	Decommission and remove the existing water meter.	No.	1		
85,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
85,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
85,40	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
85,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
85,6	Test and commission the installation	No.	1		
86	NSRI				
86,1	Decommission and remove the existing water meter.	No.	1		
86,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
86,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
86,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
86,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
86,6	Test and commission the installation	No.	1		
87	Tuck Shop				
87,1	Decommission and remove the existing water meter.	No.	1		
87,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
87,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
87,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
87,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
87,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
88	Slipway				
88,1	Decommission and remove the existing water meter.	No.	1		
88,2	Supply and install a new 28 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
88,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
88,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
88,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
88,60	Test and commission the installation	No.	1		
89	Administration Building (TNPA)				
89,1	Decommission and remove the existing water meter.	No.	1		
89,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
89,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
89,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
89,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
89,6	Test and commission the installation	No.	1		
90	Vincent Jetty Quay Side Supply @ Romonza				
90,1	Decommission and remove the existing water meter.	No.	1		
90,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
90,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
90,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
90,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
90,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
91	Marine Park Home				
91,1	Decommission and remove the existing water meter.	No.	1		
91,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
91,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
91,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
91,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
91,6	Test and commission the installation	No.	1		
92	Pioneer 1				
92,1	Decommission and remove the existing water meter.	No.	1		
92,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
92,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
92,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
92,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
92,6	Test and commission the installation	No.	1		
93	Pioneer 2				
93,1	Decommission and remove the existing water meter.	No.	1		
93,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
93,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
93,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
93,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
93,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
94	Lucky Star				
94,1	Decommission and remove the existing water meter.	No.	1		
94,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
94,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
94,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
94,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
94,6	Test and commission the installation	No.	1		
95	Walk on Moorings (TNPA)				
95,1	Decommission and remove the existing water meter.	No.	1		
95,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
95,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
95,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
95,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
95,6	Test and commission the installation	No.	1		
96	Wash-bay (TNPA)				
96,1	Decommission and remove the existing water meter.	No.	1		
96,2	Supply and install a new 22 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
96,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
96,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
96,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
96,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
97	LBS 185 (Yacht Club) – Bulk Meter				
97,1	Decommission and remove the existing water meter.	No.	1		
97,2	Supply and install a new 28 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
97,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
97,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
97,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
97,6	Test and commission the installation	No.	1		
98	Blue Door				
98,1	Decommission and remove the existing water meter.	No.	1		
98,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
98,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
98,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
98,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
98,6	Test and commission the installation	No.	1		
99	Mozambiek				
99,1	Decommission and remove the existing water meter.	No.	1		
99,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
99,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
99,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
99,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
99,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
100	Ladies Ablutions (TNPA)				
100,1	Decommission and remove the existing water meter.	No.	1		
100,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
100,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
100,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
100,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
100,6	Test and commission the installation	No.	1		
101	Men's Ablutions (TNPA)				
101,1	Decommission and remove the existing water meter.	No.	1		
101,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
101,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
101,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
101,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
101,6	Test and commission the installation	No.	1		
102	Aquamarine				
102,1	Decommission and remove the existing water meter.	No.	1		
102,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
102,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
102,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
102,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
102,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY MSB				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of Electricity Meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVARh/MVARh), Apparent energy (kVAh/MVAh) etc.,				
1,1	Decommission and remove the existing Electricity Meters in various locations	No.	68		
1,2	Supply, install and configure a new Smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.),	No.	68		
1,3	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs.	No.	68		
1,4	Test and commission the installation.	No.	68		
	Replacement of Electricity Meters in various locations (Single Phase)				
2,1	Decommission and remove the existing Electricity Meters in various locations	No.	2		
2,2	Supply, install and configure a new Smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.),	No.	2		
2,3	Establish connectivity: Link the meters to the billing server and the new Utilities Management System via the LAN.	No.	2		
2,4	Test and commission the installation.	No.	2		
2,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
2,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
2,7	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY MSB				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	5000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m ³	900		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	5000		
1,4	Reinstate existing surface and make good	m ²	1500		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	2		
1,6	Supply, install and configure media converters	No.	6		
1,7	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	2		
1,8	Supply and install a 9U swing frame cabinet 900mm deep	No.	1		
1,9	Design and construction of Manholes for fibre	No.	5		
1,10	Supply, install and setup the sewers	No.	2		
1,12	Splicing of Fibres	No.	48		
1,13	OTDR Testing (Test and submit line losses)	No.	48		
1,14	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,15	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	1		
1,16	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY MSB				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	6		
1,2	Smart automatic energy meter reading devices	No.	7		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY MSB				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
	Metering gateways				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data.	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilities management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP ERP.	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation.	Sum	1		
1,4	Testing and commissioning of the software side both individually and	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY MSB				

PORT OF MOSSEL BAY		
	DESCRIPTION	AMOUNT R
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF CAPE TOWN				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valuated and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
A	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	<u>Facilities for the Engineer</u>				
2.1	Survey assistants and materials	Month	11		
	<u>Facilities for the Contractor</u>				
2.2	Offices and storage sheds	Month	11		
2.3	Ablution and latrine facilities	Month	11		
2.4	Tools and equipment	Month	11		
2.5	Water supplies, electric power and communications	Month	11		
2.6	Dealing with water (Sub-clause 5.5)	Month	11		
2.7	Access (Sub-clause 5.8)	Month	11		
2.8	Plant	Month	11		
	Supervision				
2.9	Supervision for duration of construction	Month	11		
	Other time-related obligations				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	11		
2.11	Compliance to Environmental Management Plan	Month	11		
	CARRIED FORWARD TO SUMMARY				0,00

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF CAPE TOWN				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	2500		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
	METER No. 01 Replacement of the meter including associated components Meter size: 200mm, existing pipe material is unknown				
2,1	Decommission and remove the existing above installation.	No.	1		
2,2	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
2,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
2,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
7					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 02 Replacement of the meter including associated components Meter size: 200mm, existing pipe material is unknown				
3,1	Decommission and remove the existing above installation.	No.	1		
3,2	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
3,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	METER No. 03 Installation of Automatic Meter Reading Device				
4,1	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	METER No. 04 Installation of Automatic Meter Reading Device				
5,1	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	METER No. 05 Installation of Automatic Meter Reading Device				
6,1	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	METER No. 06 Installation of Automatic Meter Reading Device				
7,1	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication. Link the meter on both the billing server and the new Utilites Management System Link the meter on both the billing server and the new Utilites Management System	No.	1		
	CARRIED FORWARD				
8					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	Replacement of Existing Water Meters				
8	NPA House out building (Plan room & toilet)				
8,1	Decommission and remove the existing water meter.	No.	1		
8,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
8,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
8,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
8,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
8,6	Test and commission the installation	No.	1		
9	Security hut - A Berth				
9,1	Decommission and remove the existing water meter.	No.	1		
9,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
9,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
9,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
9,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
9,6	Test and commission the installation	No.	1		
10	Corner A & B Berth tunnel.				
10,1	Decommission and remove the existing water meter.	No.	1		
10,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
10,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
10,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
10,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
10,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
9					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
11	Ferro-marine - A Berth - Ablution				
11,1	Decommission and remove the existing water meter.	No.	1		
11,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
11,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
11,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
11,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
11,6	Test and commission the installation	No.	1		
12	Ferro-marine - A Berth - Admin office				
12,1	Decommission and remove the existing water meter.	No.	1		
12,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
12,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
12,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
12,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
12,6	Test and commission the installation	No.	1		
13	NPA House				
13,1	Decommission and remove the existing water meter.	No.	1		
13,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
13,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
13,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
13,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
13,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
14	A Berth area.				
14,1	Decommission and remove the existing water meter.	No.	1		
14,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
14,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
14,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
14,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
14,6	Test and commission the installation	No.	1		
15	Corporate Affairs - B Berth				
15,1	Decommission and remove the existing water meter.	No.	1		
15,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
15,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
15,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
15,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
15,6	Test and commission the installation	No.	1		
16	IT - Opp Corp Affrs - vacant				
16,1	Decommission and remove the existing water meter.	No.	1		
16,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
16,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
17	Training Centre				
17,1	Decommission and remove the existing water meter.	No.	1		
17,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
17,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
17,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
17,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
17,6	Test and commission the installation	No.	1		
18	Fresh Produce Term. (in manhole on B/C Berth)				
18,1	Decommission and remove the existing water meter.	No.	1		
18,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
18,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
18,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
18,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
18,6	Test and commission the installation	No.	1		
19	Fresh Produce Term. (in manhole on B/C Berth)				
19,1	Decommission and remove the existing water meter.	No.	1		
19,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
19,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
19,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
19,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
19,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
12					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
20	Fresh Produce Terminals Cape Town.				
20,1	Decommission and remove the existing water meter.	No.	1		
20,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
20,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
20,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
20,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
20,6	Test and commission the installation	No.	1		
21	Fresh Produce Terminals Cape Town. (On balcony)				
21,1	Decommission and remove the existing water meter.	No.	1		
21,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
21,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
21,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
21,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
21,6	Test and commission the installation	No.	1		
22	B-C Berth (Tunnel - sprinkler system) - FPT				
22,1	Decommission and remove the existing water meter.	No.	1		
22,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
22,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
22,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
22,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
22,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
23	Fresh Produce Term. (Against wall- inside D Shed)				
23,1	Decommission and remove the existing water meter.	No.	1		
23,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
23,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
23,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
23,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
23,6	Test and commission the installation	No.	1		
24	Long Line Tuna Corporation (pty) Ltd				
24,1	Decommission and remove the existing water meter.	No.	1		
24,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
24,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
24,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
24,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
24,6	Test and commission the installation	No.	1		
25	Portside Stevedoring Services offices.				
25,1	Decommission and remove the existing water meter.	No.	1		
25,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
25,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
25,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
25,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
25,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
14					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
26	SA Police / Dept.of Public Works				
26,1	Decommission and remove the existing water meter.	No.	1		
26,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
26,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
26,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
26,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
26,6	Test and commission the installation	No.	1		
27	South Arm Rd Security building				
27,1	Decommission and remove the existing water meter.	No.	1		
27,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
27,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
27,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
27,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
27,6	Test and commission the installation	No.	1		
28	CCC Municipal water meter at Dock Road.				
28,1	Decommission and remove the existing water meter.	No.	1		
28,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
28,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
28,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
28,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
28,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
15					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
29	Transnet Projects RME (Bruce)				
29,1	Decommission and remove the existing water meter.	No.	1		
29,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
29,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
29,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
29,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
29,6	Test and commission the installation	No.	1		
30	Svitzer Wijsmuller (inside Filing room)				
30,1	Decommission and remove the existing water meter.	No.	1		
30,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
30,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
30,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
30,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
30,6	Test and commission the installation	No.	1		
31	Svitzer Wijsmuller				
31,1	Decommission and remove the existing water meter.	No.	1		
31,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
31,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
31,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
31,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
31,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
16					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
32	Bid freight.				
32,1	Decommission and remove the existing water meter.	No.	1		
32,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
32,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
32,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
32,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
32,6	Test and commission the installation	No.	1		
33	SA Stevedores				
33,1	Decommission and remove the existing water meter.	No.	1		
33,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
33,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
33,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
33,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
33,6	Test and commission the installation	No.	1		
34	SA Stevedores / Lighthouse Martinet Ind.Eng.CC				
34,1	Decommission and remove the existing water meter.	No.	1		
34,2	Supply and install a new 200 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
34,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
34,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
34,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
34,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
35	Magmaster (Lighthouse) (INCOMING)				
35,1	Decommission and remove the existing water meter.	No.	1		
35,2	Supply and install a new 200 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
35,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
35,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
35,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
35,6	Test and commission the installation	No.	1		
36	Magmaster (Lighthouse) (REVERSE)				
36,1	Decommission and remove the existing water meter.	No.	1		
36,2	Supply and install a new 200 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
36,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
36,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
36,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
36,6	Test and commission the installation	No.	1		
37	Magmaster (Lighthouse) (NETT INCOMING)				
37,1	Decommission and remove the existing water meter.	No.	1		
37,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
37,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
37,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
37,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
37,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
18					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
38	Lighthouse Services				
38,1	Decommission and remove the existing water meter.	No.	1		
38,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
38,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
38,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
38,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
38,6	Test and commission the installation	No.	1		
39	SA Stevedores (Melfra)				
39,1	Decommission and remove the existing water meter.	No.	1		
39,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
39,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
39,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
39,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
39,6	Test and commission the installation	No.	1		
40	Robben Marine / SA Stevedores				
40,1	Decommission and remove the existing water meter.	No.	1		
40,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
40,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
40,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
40,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
40,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
<u>19</u>					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
41	Safbulk (pty) ltd				
41,1	Decommission and remove the existing water meter.	No.	1		
41,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
41,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
41,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
41,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
41,6	Test and commission the installation	No.	1		
42	Atlotech (pty) ltd - offices				
42,1	Decommission and remove the existing water meter.	No.	1		
42,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
42,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
42,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
42,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
42,6	Test and commission the installation	No.	1		
43	Atlotech (pty) ltd - workshop				
43,1	Decommission and remove the existing water meter.	No.	1		
43,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
43,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
43,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
43,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
43,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				R -
20					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
44	Mission to seamen in SA				
44,1	Decommission and remove the existing water meter.	No.	1		
44,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
44,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
44,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
44,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
44,6	Test and commission the installation	No.	1		
45	Electrical workshop				
45,1	Decommission and remove the existing water meter.	No.	1		
45,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
45,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
45,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
45,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
45,6	Test and commission the installation	No.	1		
46	Elect. Depot Mess & Ablution.				
46,1	Decommission and remove the existing water meter.	No.	1		
46,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
46,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
46,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
46,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
46,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				R -
<u>21</u>					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
47	Berthing Office				
47,1	Decommission and remove the existing water meter.	No.	1		
47,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
47,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
47,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
47,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
47,6	Test and commission the installation	No.	1		
48	P&O Ports Nationwide Cargo Terminal SA (pty) Ltd.				
48,1	Decommission and remove the existing water meter.	No.	1		
48,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
48,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
48,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
48,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
48,6	Test and commission the installation	No.	1		
49	Cowrie place (MPT) - Bon 1				
49,1	Decommission and remove the existing water meter.	No.	1		
49,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
49,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
49,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
49,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
49,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
50	Cowrie place (MPT) - Bon 1				
50,1	Decommission and remove the existing water meter.	No.	1		
50,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
50,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
50,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
50,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
50,6	Test and commission the installation	No.	1		
51	Ship Society of SA / Port Services (pty) Ltd - Bon 1				
51,1	Decommission and remove the existing water meter.	No.	1		
51,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
51,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
51,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
51,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
51,6	Test and commission the installation	No.	1		
52	Christelike Seemans Organisasie - D Mast Bon 1				
52,1	Decommission and remove the existing water meter.	No.	1		
52,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
52,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
52,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
52,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
52,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				R -
24					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
53	Marine Operations Manager - Dock Master Bon 1				
53,1	Decommission and remove the existing water meter.	No.	1		
53,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
53,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
53,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
53,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
53,6	Test and commission the installation	No.	1		
54	Dockland				
54,1	Decommission and remove the existing water meter.	No.	1		
54,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
54,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
54,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
54,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
54,6	Test and commission the installation	No.	1		
55	Control Point 26 (Spoornet)				
55,1	Decommission and remove the existing water meter.	No.	1		
55,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
55,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
55,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
55,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
55,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				R -

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
56	Security Hut (Heerengracht Entrance)				
56,1	Decommission and remove the existing water meter.	m ³	5		
56,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	m	4,5		
56,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
56,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
56,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
56,6	Test and commission the installation	No.	1		
57	Maritime Training (Ex Creche)				
57,1	Decommission and remove the existing water meter.	No.	1		
57,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	m	8		
57,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
57,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
57,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
57,6	Test and commission the installation	No.	1		
58	Spoornet (Heerengracht Entrance)				
58,1	Decommission and remove the existing water meter.	No.	1		
58,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
58,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
58,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
58,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
58,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
59	Die Evangelie aan die seelui.				
59,1	Decommission and remove the existing water meter.	m ³	5		
59,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	m	4,5		
59,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
59,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
59,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
59,6	Test and commission the installation	No.	1		
60	Training Centre for Seamen.	No.	1		
60,1	Decommission and remove the existing water meter.	No.	1		
60,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	m	8		
60,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
60,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging				
60,5	Create an account and link the meter to the account and apply the appropriate tariffs				
60,6	Test and commission the installation				
61	Eastern deli				
61,1	Decommission and remove the existing water meter.	No.	1		
61,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
61,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
61,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
61,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
61,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				
27					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
62	SHEQ building				
62,1	Decommission and remove the existing water meter.	No.	1		
62,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
62,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
62,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
62,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
62,6	Test and commission the installation	No.	1		
63	Pirow St. Security building				
63,1	Decommission and remove the existing water meter.	No.	1		
63,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
63,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
63,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
63,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
63,6	Test and commission the installation	No.	1		
64	E-Berth Shed (Cold Store)				
64,1	Decommission and remove the existing water meter.	No.	1		
64,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
64,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
64,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
64,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
64,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
65	E-Berth Shed (Passenger Terminal)				
65,1	Decommission and remove the existing water meter.	No.	4		
65,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	4		
65,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	4		
65,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	4		
65,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	4		
65,6	Test and commission the installation	No.	4		
66	F-Berth Security bldg.				
66,1	Decommission and remove the existing water meter.	No.	1		
66,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
66,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
66,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
66,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
66,6	Test and commission the installation	No.	1		
67	Weighbridge (F Berth)				
67,1	Decommission and remove the existing water meter.	No.	1		
67,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
67,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
67,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
67,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
67,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
68	Duty Free Shop				
68,1	Decommission and remove the existing water meter.	No.	1		
68,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
68,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
68,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
68,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
68,6	Test and commission the installation	No.	1		
69	Heribi House				
69,1	Decommission and remove the existing water meter.	No.	1		
69,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
69,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
69,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
69,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
69,6	Test and commission the installation	No.	1		
70	SA Stevedores (Port Services) - ex gardener bldg				
70,1	Decommission and remove the existing water meter.	No.	1		
70,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
70,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
70,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
70,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
70,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
71	Combi Terminal bldg.				
71,1	Decommission and remove the existing water meter.	No.	1		
71,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
71,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
71,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
71,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
71,6	Test and commission the installation	No.	1		
72	G-Berth Shed (New meter)				
72,1	Decommission and remove the existing water meter.	No.	1		
72,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
72,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
72,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
72,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
72,6	Test and commission the installation	No.	1		
73	G-Berth Shed (Against inside wall)				
73,1	Decommission and remove the existing water meter.	No.	1		
73,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
73,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
73,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
73,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
73,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
74	G-Berth mess & ablution.				
74,1	Decommission and remove the existing water meter.	No.	1		
74,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
74,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
74,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
74,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
74,6	Test and commission the installation	No.	1		
75	G-Berth Quay office				
75,1	Decommission and remove the existing water meter.	No.	1		
75,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
75,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
75,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
75,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
75,6	Test and commission the installation	No.	1		
76	H-Berth Security kiosk				
76,1	Decommission and remove the existing water meter.	No.	1		
76,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
76,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
76,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
76,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
76,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
77	H-Berth Shed				
77,1	Decommission and remove the existing water meter.	No.	3		
77,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	3		
77,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	3		
77,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	3		
77,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	3		
77,6	Test and commission the installation	No.	3		
78	J-Berth mess & ablution				
78,1	Decommission and remove the existing water meter.	No.	1		
78,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
78,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
78,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
78,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
78,6	Test and commission the installation	No.	1		
79	J-Berth Shed				
79,1	Decommission and remove the existing water meter.	No.	2		
79,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	2		
79,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
79,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
79,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
79,6	Test and commission the installation	No.	2		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
80	J-Berth store & Toilets				
80,1	Decommission and remove the existing water meter.	No.	1		
80,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
80,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
80,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
80,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
80,6	Test and commission the installation	No.	1		
81	Operations Rail to rail control block offices				
81,1	Decommission and remove the existing water meter.	No.	1		
81,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
81,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
81,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
81,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
81,6	Test and commission the installation	No.	1		
82	Forklift depot				
82,1	Decommission and remove the existing water meter.	No.	1		
82,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
82,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
82,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
82,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
82,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
83	L-Berth Mess & Ablution bldg				
83,1	Decommission and remove the existing water meter.	No.	1		
83,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
83,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
83,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
83,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
83,6	Test and commission the installation	No.	1		
84	L-Berth Security bldg.				
84,1	Decommission and remove the existing water meter.	No.	1		
84,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
84,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
84,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
84,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
84,6	Test and commission the installation	No.	1		
85	J-Berth Security kiosk				
85,1	Decommission and remove the existing water meter.	No.	1		
85,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
85,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
85,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
85,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
85,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
86	Commercial Cold Store (Duncan Dock) (pty) Ltd				
86,1	Decommission and remove the existing water meter.	No.	1		
86,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
86,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
86,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
86,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
86,6	Test and commission the installation	No.	1		
87	SAS Unities M-Berth				
87,1	Decommission and remove the existing water meter.	No.	2		
87,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	2		
87,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
87,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
87,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
87,6	Test and commission the installation	No.	2		
88	Security hut (M-Berth)				
88,1	Decommission and remove the existing water meter.	No.	1		
88,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
88,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
88,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
88,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
88,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
89	Boss marine				
89,1	Decommission and remove the existing water meter.	No.	1		
89,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
89,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
89,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
89,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
89,6	Test and commission the installation	No.	1		
90	Resource Ballast				
90,1	Decommission and remove the existing water meter.	No.	1		
90,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
90,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
90,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
90,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
90,6	Test and commission the installation	No.	1		
91	RCYC Water supply to ships.				
91,1	Decommission and remove the existing water meter.	No.	1		
91,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
91,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
91,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
91,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
91,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
92	RCYC (inside repair area)				
92,1	Decommission and remove the existing water meter.	No.	1		
92,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
92,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
92,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
92,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
92,6	Test and commission the installation	No.	1		
93	RCYC (entrance - inside)				
93,1	Decommission and remove the existing water meter.	No.	1		
93,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
93,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
93,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
93,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
93,6	Test and commission the installation	No.	1		
94	RCYC (entrance - outside)				
94,1	Decommission and remove the existing water meter.	No.	1		
94,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
94,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
94,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
94,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
94,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
95	RCYC (kitchen area)				
95,1	Decommission and remove the existing water meter.	No.	1		
95,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
95,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
95,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
95,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
95,6	Test and commission the installation	No.	1		
96	Sailing School (RCYC)				
96,1	Decommission and remove the existing water meter.	No.	1		
96,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
96,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
96,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
96,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
96,6	Test and commission the installation	No.	1		
97	International Yacht Brokers Cape (pty) Ltd				
97,1	Decommission and remove the existing water meter.	No.	1		
97,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
97,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
97,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
97,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
97,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
98	Spoornet (opposite RCYC)				
98,1	Decommission and remove the existing water meter.	No.	1		
98,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
98,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
98,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
98,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
98,6	Test and commission the installation	No.	1		
99	Globe Engineering Works (pty) Ltd				
99,1	Decommission and remove the existing water meter.	No.	1		
99,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
99,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
99,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
99,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
99,6	Test and commission the installation	No.	1		
100	Misplon bridge Security building				
100,1	Decommission and remove the existing water meter.	No.	1		
100,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
100,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
100,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
100,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
100,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
101	Misplon bridge Security building				
101,1	Decommission and remove the existing water meter.	No.	1		
101,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
101,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
101,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
101,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
101,6	Test and commission the installation	No.	1		
102	JJ van Greunen				
102,1	Decommission and remove the existing water meter.	No.	1		
102,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
102,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
102,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
102,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
102,6	Test and commission the installation	No.	1		
103	De Beers				
103,1	Decommission and remove the existing water meter.	No.	1		
103,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
103,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
103,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
103,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
103,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
104	Harbour Weld				
104,1	Decommission and remove the existing water meter.	No.	1		
104,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
104,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
104,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
104,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
104,6	Test and commission the installation	No.	1		
105	Fusion Hydraulics CC				
105,1	Decommission and remove the existing water meter.	No.	1		
105,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
105,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
105,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
105,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
105,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
106	MRH				
106,1	Decommission and remove the existing water meter.	No.	1		
106,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
106,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
106,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
106,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
106,6	Test and commission the installation	No.	1		
107	NNA				
107,1	Decommission and remove the existing water meter.	No.	1		
107,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
107,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
107,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
107,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
107,6	Test and commission the installation	No.	1		
108	SGB Scaffolding				
108,1	Decommission and remove the existing water meter.	No.	1		
108,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
108,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
108,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
108,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
108,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
109	Hazard Marine CC				
109,1	Decommission and remove the existing water meter.	No.	1		
109,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
109,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
109,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
109,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
109,6	Test and commission the installation	No.	1		
110	Marine manager CC Propnet				
110,1	Decommission and remove the existing water meter.	No.	1		
110,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
110,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
110,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
110,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
110,6	Test and commission the installation	No.	1		
111	Quantum leap				
111,1	Decommission and remove the existing water meter.	No.	1		
111,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
111,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
111,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
111,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
111,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
112	Cape Diving (Pty) Ltd				
112,1	Decommission and remove the existing water meter.	No.	1		
112,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
112,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
112,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
112,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
112,6	Test and commission the installation	No.	1		
113	NPA Staff SDD ablution (Grant Walker-Dockmaster)				
113,1	Decommission and remove the existing water meter.	No.	1		
113,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
113,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
113,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
113,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
113,6	Test and commission the installation	No.	1		
114	Dock Master's office				
114,1	Decommission and remove the existing water meter.	No.	1		
114,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
114,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
114,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
114,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
114,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
115	ALBATROSS (trevshan)				
115,1	Decommission and remove the existing water meter.	No.	1		
115,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
115,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
115,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
115,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
115,6	Test and commission the installation	No.	1		
116	Globe Engineering (office block & Ablution).				
116,1	Decommission and remove the existing water meter.	No.	1		
116,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
116,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
116,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
116,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
116,6	Test and commission the installation	No.	1		
117	Supply pipe for lessees in SSD area.				
117,1	Decommission and remove the existing water meter.	No.	1		
117,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
117,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
117,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
117,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
117,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
118	Security hut SSD boom entrance				
118,1	Decommission and remove the existing water meter.	No.	1		
118,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
118,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
118,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
118,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
118,6	Test and commission the installation	No.	1		
119	The Pure Cane Molasses Co.				
119,1	Decommission and remove the existing water meter.	No.	1		
119,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
119,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
119,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
119,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
119,6	Test and commission the installation	No.	1		
120	Elekt. Werkwinkel				
120,1	Decommission and remove the existing water meter.	No.	1		
120,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
120,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
120,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
120,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
120,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
121	Taipei Liaison office				
121,1	Decommission and remove the existing water meter.	No.	1		
121,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
121,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
121,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
121,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
121,6	Test and commission the installation	No.	1		
122	South East Marine services (pty) Ltd				
122,1	Decommission and remove the existing water meter.	No.	1		
122,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
122,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
122,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
122,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
122,6	Test and commission the installation	No.	1		
123	Nautilus (pty) Ltd				
123,1	Decommission and remove the existing water meter.	No.	3		
123,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	3		
123,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	3		
123,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	3		
123,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	3		
123,6	Test and commission the installation	No.	3		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
124	Marine Slops (pty) Ltd				
124,1	Decommission and remove the existing water meter.	No.	1		
124,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
124,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
124,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
124,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
124,6	Test and commission the installation	No.	1		
125	Albatross Offshore Services				
125,1	Decommission and remove the existing water meter.	No.	1		
125,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
125,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
125,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
125,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
125,6	Test and commission the installation	No.	1		
126	To be confirmed				
126,1	Decommission and remove the existing water meter.	No.	1		
126,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
126,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
126,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
126,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
126,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
127	Elgin Brown Hamer (pty) ltd				
127,1	Decommission and remove the existing water meter.	No.	1		
127,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
127,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
127,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
127,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
127,6	Test and commission the installation	No.	1		
128	Security hut SSDb				
128,1	Decommission and remove the existing water meter.	No.	1		
128,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
128,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
128,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
128,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
128,6	Test and commission the installation	No.	1		
129	Watermain feeding Landing Wall.				
129,1	Decommission and remove the existing water meter.	No.	1		
129,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
129,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
129,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
129,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
129,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
130	Crossberth Cold Stores (PTY) LTD				
130,1	Decommission and remove the existing water meter.	No.	1		
130,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
130,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
130,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
130,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
130,6	Test and commission the installation	No.	1		
131	Crossberth Cold Stores (PTY) LTD				
131,1	Decommission and remove the existing water meter.	No.	1		
131,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
131,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
131,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
131,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
131,6	Test and commission the installation	No.	1		
132	Globe Engineering Works (pty) Ltd				
132,1	Decommission and remove the existing water meter.	No.	1		
132,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
132,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
132,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
132,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
132,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
133	Feedline to Caltex area.				
133,1	Decommission and remove the existing water meter.	No.	1		
133,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
133,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
133,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
133,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
133,6	Test and commission the installation	No.	1		
134	Security hut Tanker basin				
134,1	Decommission and remove the existing water meter.	No.	1		
134,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
134,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
134,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
134,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
134,6	Test and commission the installation	No.	1		
135	Astron Energy (PTY) LTD				
135,1	Decommission and remove the existing water meter.	No.	1		
135,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
135,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
135,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
135,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
135,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
136	BP, Caltex, SA Energy Co, Shell (JBS)				
136,1	Decommission and remove the existing water meter.	No.	1		
136,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
136,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
136,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
136,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
136,6	Test and commission the installation	No.	1		
137	Fire Dept. Tanker basin 2 - NPA				
137,1	Decommission and remove the existing water meter.	No.	1		
137,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
137,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
137,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
137,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
137,6	Test and commission the installation	No.	1		
138	Fire Dept. (Steel scrap yard - Reclaimed Area).				
138,1	Decommission and remove the existing water meter.	No.	1		
138,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
138,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
138,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
138,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
138,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
139	Astron Energy (PTY) LTD				
139,1	Decommission and remove the existing water meter.	No.	2		
139,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	2		
139,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
139,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
139,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
139,6	Test and commission the installation	No.	2		
140	Pump room on Eastern Mole No.2				
140,1	Decommission and remove the existing water meter.	No.	1		
140,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
140,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
140,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
140,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
140,6	Test and commission the installation	No.	1		
141	Mess & Ablution on Eastern Mole No.2.				
141,1	Decommission and remove the existing water meter.	No.	1		
141,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
141,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
141,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
141,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
141,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
142	Toilet on Eastern Mole No.2.				
142,1	Decommission and remove the existing water meter.	No.	1		
142,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
142,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
142,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
142,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
142,6	Test and commission the installation	No.	1		
143	Telkom SA Ltd				
143,1	Decommission and remove the existing water meter.	No.	1		
143,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
143,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
143,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
143,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
143,6	Test and commission the installation	No.	1		
144	Standpipe TAP				
144,1	Decommission and remove the existing water meter.	No.	1		
144,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
144,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
144,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
144,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
144,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
145	FFS				
145,1	Decommission and remove the existing water meter.	No.	1		
145,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
145,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
145,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
145,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
145,6	Test and commission the installation	No.	1		
146	Cape Town Bulk Storage (pty) Ltd FFS				
146,1	Decommission and remove the existing water meter.	No.	1		
146,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
146,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
146,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
146,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
146,6	Test and commission the installation	No.	1		
147	Cape Town Bulk Storage (pty) Ltd				
147,1	Decommission and remove the existing water meter.	No.	1		
147,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
147,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
147,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
147,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
147,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
148	Elliott Basin security bldg				
148,1	Decommission and remove the existing water meter.	No.	1		
148,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
148,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
148,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
148,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
148,6	Test and commission the installation	No.	1		
149	Dorbyl Marine (pty) Ltd.				
149,1	Decommission and remove the existing water meter.	No.	1		
149,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
149,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
149,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
149,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
149,6	Test and commission the installation	No.	1		
150	Dorbyl Marine (pty) Ltd (right next to workshop)				
150,1	Decommission and remove the existing water meter.	No.	1		
150,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
150,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
150,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
150,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
150,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
151	Dorbyl Marine (pty) ltd (workshop) (inside building)				
151,1	Decommission and remove the existing water meter.	No.	1		
151,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
151,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
151,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
151,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
151,6	Test and commission the installation	No.	1		
152	Globe Engineering (domestic main)				
152,1	Decommission and remove the existing water meter.	No.	1		
152,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
152,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
152,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
152,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
152,6	Test and commission the installation	No.	1		
153	Globe Engineering				
153,1	Decommission and remove the existing water meter.	No.	1		
153,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
153,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
153,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
153,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
153,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
154	Elliott Basin ring feed meter				
154,1	Decommission and remove the existing water meter.	No.	1		
154,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
154,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
154,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
154,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
154,6	Test and commission the installation	No.	1		
155	Indo Atlantic Fishing (SHIPPING)				
155,1	Decommission and remove the existing water meter.	No.	1		
155,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
155,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
155,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
155,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
155,6	Test and commission the installation	No.	1		
156	Theodore Luis Camara				
156,1	Decommission and remove the existing water meter.	No.	1		
156,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
156,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
156,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
156,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
156,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
157	Mechanical workshop				
157,1	Decommission and remove the existing water meter.	No.	1		
157,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
157,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
157,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
157,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
157,6	Test and commission the installation	No.	1		
158	Shop 24				
158,1	Decommission and remove the existing water meter.	No.	1		
158,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
158,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
158,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
158,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
158,6	Test and commission the installation	No.	1		
1,16	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
159	Shop 24 mess & ablution for general workers.				
159,1	Decommission and remove the existing water meter.	No.	1		
159,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
159,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
159,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
159,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
159,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
160	Farocean marine (Damen Shipping)				
160,1	Decommission and remove the existing water meter.	No.	1		
160,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
160,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
160,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
160,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
160,6	Test and commission the installation	No.	1		
161	Bassticks				
161,1	Decommission and remove the existing water meter.	No.	1		
161,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
161,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
161,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
161,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
161,6	Test and commission the installation	No.	1		
162	Damen Shipping (Back yard).				
162,1	Decommission and remove the existing water meter.	No.	1		
162,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
162,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
162,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
162,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
162,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
163	Panama Jacks (pty) ltd				
163,1	Decommission and remove the existing water meter.	No.	1		
163,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
163,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
163,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
163,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
163,6	Test and commission the installation	No.	1		
164	Damen				
164,1	Decommission and remove the existing water meter.	No.	1		
164,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
164,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
164,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
164,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
164,6	Test and commission the installation	No.	1		
165	Royal Cape Yacht Club (meter that supplies yachts)				
165,1	Decommission and remove the existing water meter.	No.	2		
165,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	2		
165,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
165,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
165,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
165,6	Test and commission the installation	No.	2		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
166	Security hut Quay 500				
166,1	Decommission and remove the existing water meter.	No.	1		
166,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
166,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
166,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
166,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
166,6	Test and commission the installation	No.	1		
167	Quay 500 Polution.				
167,1	Decommission and remove the existing water meter.	No.	1		
167,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
167,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
167,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
167,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
167,6	Test and commission the installation	No.	1		
168	Ro-Ro Pier (Quay 500) Mountain side				
168,1	Decommission and remove the existing water meter.	No.	1		
168,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
168,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
168,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
168,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
168,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
169	WBHO Work site (Panama Jacks)				
169,1	Decommission and remove the existing water meter.	No.	1		
169,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
169,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
169,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
169,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
169,6	Test and commission the installation	No.	1		
170	Damen Shipping (Panama Jacks side)				
170,1	Decommission and remove the existing water meter.	No.	1		
170,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
170,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
170,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
170,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
170,6	Test and commission the installation	No.	1		
171	WBHO Container (Medite bldg.)				
171,1	Decommission and remove the existing water meter.	No.	1		
171,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
171,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
171,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
171,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
171,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
172	Civil Store under BS bridge				
172,1	Decommission and remove the existing water meter.	No.	1		
172,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
172,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
172,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
172,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
172,6	Test and commission the installation	No.	1		
173	Crest Chemicals				
173,1	Decommission and remove the existing water meter.	No.	1		
173,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
173,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
173,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
173,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
173,6	Test and commission the installation	No.	1		
174	Lusitania Frozen Goods Container Road				
174,1	Decommission and remove the existing water meter.	No.	1		
174,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
174,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
174,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
174,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
174,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
175	R.J.Sauthey (Scaffolding)				
175,1	Decommission and remove the existing water meter.	No.	1		
175,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
175,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
175,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
175,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
175,6	Test and commission the installation	No.	1		
176	Old Container link (Grindrod Logistics) (SACD)				
176,1	Decommission and remove the existing water meter.	No.	1		
176,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
176,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
176,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
176,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
176,6	Test and commission the installation	No.	1		
177	Caltex service station Marine Drive/Astron Energy (PTY) LTD				
177,1	Decommission and remove the existing water meter.	No.	1		
177,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
177,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
177,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
177,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
177,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
178	TCP (Ismail)				
178,1	Decommission and remove the existing water meter.	No.	1		
178,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
178,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
178,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
178,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
178,6	Test and commission the installation	No.	1		
179	Security gate NPA Paarden Eiland				
179,1	Decommission and remove the existing water meter.	No.	1		
179,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
179,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
179,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
179,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
179,6	Test and commission the installation	No.	1		
180	Joint Bunkering Services Container Road				
180,1	Decommission and remove the existing water meter.	No.	1		
180,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
180,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
180,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
180,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
180,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
181	Shmidthauser				
181,1	Decommission and remove the existing water meter.	No.	1		
181,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
181,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
181,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
181,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
181,6	Test and commission the installation	No.	1		
182	Y & L Frozen Fish Enterprises Container Road				
182,1	Decommission and remove the existing water meter.	No.	1		
182,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
182,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
182,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
182,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
182,6	Test and commission the installation	No.	1		
183	Y & L Frozen Fish Enterprises Container Road				
183,1	Decommission and remove the existing water meter.	No.	1		
183,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
183,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
183,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
183,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
183,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
184	M.M.Hilario				
184,1	Decommission and remove the existing water meter.	No.	1		
184,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
184,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
184,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
184,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
184,6	Test and commission the installation	No.	1		
185	BSD Weigh bridge				
185,1	Decommission and remove the existing water meter.	No.	1		
185,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
185,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
185,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
185,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
185,6	Test and commission the installation	No.	1		
186	BSD Weigh bridge				
186,1	Decommission and remove the existing water meter.	No.	1		
186,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
186,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
186,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
186,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
186,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
187	Container Terminal drivers mess & ablution. (Reverse)				
187,1	Decommission and remove the existing water meter.	No.	1		
187,2	Supply and install a new 40 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
187,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
187,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
187,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
187,6	Test and commission the installation	No.	1		
188	Container Terminal drivers mess & ablution.				
188,1	Decommission and remove the existing water meter.	No.	1		
188,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
188,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
188,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
188,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
188,6	Test and commission the installation	No.	1		
189	Security bldg (Quay 700)				
189,1	Decommission and remove the existing water meter.	No.	1		
189,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
189,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
189,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
189,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
189,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
190	WBHO Site office (Quay 700)				
190,1	Decommission and remove the existing water meter.	No.	1		
190,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
190,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
190,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
190,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
190,6	Test and commission the installation	No.	1		
191	SAPO ski-cabin				
191,1	Decommission and remove the existing water meter.	No.	1		
191,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
191,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
191,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
191,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
191,6	Test and commission the installation	No.	1		
192	Vehicle Testing Centre (old) (Kershaw 073 257 1736)				
192,1	Decommission and remove the existing water meter.	No.	1		
192,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
192,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
192,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
192,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
192,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
193	Vehicle Repair Centre (Freight Dynamics)				
193,1	Decommission and remove the existing water meter.	No.	1		
193,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
193,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
193,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
193,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
193,6	Test and commission the installation	No.	1		
194	Container Fruit Terminal (inside Fire Control room)				
194,1	Decommission and remove the existing water meter.	No.	1		
194,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
194,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
194,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
194,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
194,6	Test and commission the installation	No.	1		
195	Helicopter Africa (pty) Ltd				
195,1	Decommission and remove the existing water meter.	No.	1		
195,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
195,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
195,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
195,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
195,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
196	Makhulu				
196,1	Decommission and remove the existing water meter.	No.	1		
196,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
196,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
196,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
196,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
196,6	Test and commission the installation	No.	1		
197	Blastrite (pty) ltd				
197,1	Decommission and remove the existing water meter.	No.	1		
197,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
197,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
197,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
197,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
197,6	Test and commission the installation	No.	1		
198	Road to Rail building				
198,1	Decommission and remove the existing water meter.	No.	1		
198,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
198,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
198,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
198,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
198,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
199	Spoornet (Bay Road)				
199,1	Decommission and remove the existing water meter.	No.	1		
199,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
199,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
199,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
199,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
199,6	Test and commission the installation	No.	1		
200	Tryang Trading Import & Export (Pty) Ltd				
200,1	Decommission and remove the existing water meter.	No.	1		
200,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
200,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
200,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
200,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
200,6	Test and commission the installation	No.	1		
201	Optimal Maintenance services CC				
201,1	Decommission and remove the existing water meter.	No.	1		
201,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
201,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
201,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
201,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
201,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
202	Raw Engineering CC				
202,1	Decommission and remove the existing water meter.	No.	1		
202,2	Supply and install a new 25 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
202,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
202,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
202,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
202,6	Test and commission the installation	No.	1		
203	Helicopter Heli Pad Cold Storage				
203,1	Decommission and remove the existing water meter.	No.	1		
203,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
203,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
203,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
203,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
203,6	Test and commission the installation	No.	1		
204	Transeva Shipping Services (Pty) Ltd				
204,1	Decommission and remove the existing water meter.	No.	1		
204,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
204,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
204,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
204,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
204,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
205	PIP Site main meter (Entrance)				
205,1	Decommission and remove the existing water meter.	No.	1		
205,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
205,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
205,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
205,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
205,6	Test and commission the installation	No.	1		
206	SACD PIP Site				
206,1	Decommission and remove the existing water meter.	No.	1		
206,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
206,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
206,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
206,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
206,6	Test and commission the installation	No.	1		
207	Eskom PIP site				
207,1	Decommission and remove the existing water meter.	No.	1		
207,2	Supply and install a new 300 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
207,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
207,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
207,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
207,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
208	East Coast Containers				
208,1	Decommission and remove the existing water meter.	No.	1		
208,2	Supply and install a new 200 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
208,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
208,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
208,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
208,6	Test and commission the installation	No.	1		
209	CCC Municipal water meter at Marine Drive.				
209,1	Decommission and remove the existing water meter.	No.	1		
209,2	Supply and install a new 200 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
209,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
209,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
209,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
209,6	Test and commission the installation	No.	1		
210	Magmaster				
210,1	Decommission and remove the existing water meter.	No.	3		
210,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	3		
210,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	3		
210,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	3		
210,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	3		
210,6	Test and commission the installation	No.	3		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
211	Two Oceans Boat Sales Marine Drive				
211,1	Decommission and remove the existing water meter.	No.	3		
211,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	3		
211,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	3		
211,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	3		
211,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	3		
211,6	Test and commission the installation	No.	3		
212	Province Log Cabins Marine Drive				
212,1	Decommission and remove the existing water meter.	No.	1		
212,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
212,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
212,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
212,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
212,6	Test and commission the installation	No.	1		
213	RME is occupying a site next to House of Cabin.				
213,1	Decommission and remove the existing water meter.	No.	1		
213,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
213,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
213,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
213,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
213,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
214	Shop 17				
214,1	Decommission and remove the existing water meter.	No.	1		
214,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
214,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
214,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
214,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
214,6	Test and commission the installation	No.	1		
215	Shop 17				
215,1	Decommission and remove the existing water meter.	No.	1		
215,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
215,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
215,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
215,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
215,6	Test and commission the installation	No.	1		
216	Civil Depot watermain				
216,1	Decommission and remove the existing water meter.	No.	1		
216,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
216,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
216,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
216,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
216,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
217	Roro Control office & abl. BSD				
217,1	Decommission and remove the existing water meter.	No.	1		
217,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
217,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
217,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
217,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
217,6	Test and commission the installation	No.	1		
218	Old SACD site (TCP - Bert)				
218,1	Decommission and remove the existing water meter.	No.	1		
218,2	Supply and install a new 80 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
218,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
218,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
218,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
218,6	Test and commission the installation	No.	1		
219	New Container Entrance to Terminal				
219,1	Decommission and remove the existing water meter.	No.	1		
219,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
219,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
219,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
219,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
219,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
220	Old Mediterranean Shipping building				
220,1	Decommission and remove the existing water meter.	No.	1		
220,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
220,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
220,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
220,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
220,6	Test and commission the installation	No.	1		
221	Quay 501 Container control office & abl. BSD				
221,1	Decommission and remove the existing water meter.	No.	1		
221,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
221,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
221,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
221,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
221,6	Test and commission the installation	No.	1		
222	Quay 601 Container control office & abl. BSD				
222,1	Decommission and remove the existing water meter.	No.	1		
222,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
222,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
222,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
222,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
222,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
223	Quay 602 Container control office & abl. BSD				
223,1	Decommission and remove the existing water meter.	No.	1		
223,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
223,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
223,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
223,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
223,6	Test and commission the installation	No.	1		
224	Quay 603 Container control office & abl. BSD				
224,1	Decommission and remove the existing water meter.	No.	1		
224,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
224,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
224,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
224,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
224,6	Test and commission the installation	No.	1		
225	Quay 604 Container control office & abl. BSD				
225,1	Decommission and remove the existing water meter.	No.	1		
225,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
225,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
225,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
225,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
225,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
226	Quay 602 Container control office & abl. BSD seaside				
226,1	Decommission and remove the existing water meter.	No.	1		
226,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
226,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
226,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
226,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
226,6	Test and commission the installation	No.	1		
227	Container Terminal building				
227,1	Decommission and remove the existing water meter.	No.	1		
227,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
227,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
227,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
227,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
227,6	Test and commission the installation	No.	1		
228	Chevron (Tanker Basin Cross Berth)				
228,1	Decommission and remove the existing water meter.	No.	1		
228,2	Supply and install a new 150 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
228,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
228,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
228,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
228,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
229	Joint Bunkering Services (TBXB)				
229,1	Decommission and remove the existing water meter.	No.	1		
229,2	Supply and install a new 100 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
229,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
229,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
229,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
229,6	Test and commission the installation	No.	1		
230	Quay 502 Container control office & abl. BSD				
230,1	Decommission and remove the existing water meter.	No.	1		
230,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
230,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
230,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
230,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
230,6	Test and commission the installation	No.	1		
231	WBHO				
231,1	Decommission and remove the existing water meter.	No.	2		
231,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	2		
231,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
231,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
231,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
231,6	Test and commission the installation	No.	2		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
232	PIP Site (S a fence & Gate)				
232,1	Decommission and remove the existing water meter.	No.	1		
232,2	Supply and install a new 15 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
232,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
232,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
232,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
232,6	Test and commission the installation	No.	1		
233	PIP site (Christopher Clement)				
233,1	Decommission and remove the existing water meter.	No.	1		
233,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
233,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
233,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
233,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
233,6	Test and commission the installation	No.	1		
234	Proticon Containers				
234,1	Decommission and remove the existing water meter.	No.	1		
234,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
234,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
234,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
234,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
234,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
235	Q 501 (Security) Robben Eiland				
235,1	Decommission and remove the existing water meter.	No.	1		
235,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
235,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
235,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
235,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
235,6	Test and commission the installation	No.	1		
236	PIP SITE NEW SECURITY BLDG				
236,1	Decommission and remove the existing water meter.	No.	1		
236,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
236,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
236,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
236,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
236,6	Test and commission the installation	No.	1		
237	DAMEN SPRAY ROOM				
237,1	Decommission and remove the existing water meter.	No.	1		
237,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
237,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
237,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
237,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
237,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
238	Etlin International (pty) Ltd (Cape Cold Storage) Heli pad				
238,1	Decommission and remove the existing water meter.	No.	1		
238,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
238,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
238,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
238,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
238,6	Test and commission the installation	No.	1		
239	CONTAINER X-RAY				
239,1	Decommission and remove the existing water meter.	No.	1		
239,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
239,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
239,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
239,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
239,6	Test and commission the installation	No.	1		
240	SJW CIVILS				
240,1	Decommission and remove the existing water meter.	No.	1		
240,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
240,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
240,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
240,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
240,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
241	Servest Marine				
241,1	Decommission and remove the existing water meter.	No.	1		
241,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
241,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
241,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
241,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
241,6	Test and commission the installation	No.	1		
242	Shouters Kiosk Blue Store				
242,1	Decommission and remove the existing water meter.	No.	1		
242,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
242,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
242,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
242,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
242,6	Test and commission the installation	No.	1		
243	Washing Bay TPT				
243,1	Decommission and remove the existing water meter.	No.	1		
243,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
243,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
243,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
243,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
243,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
244	De Beers @ L-Berth				
244,1	Decommission and remove the existing water meter.	No.	1		
244,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
244,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
244,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
244,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
244,6	Test and commission the installation	No.	1		
245	Construction @ Eastern Mole				
245,1	Decommission and remove the existing water meter.	No.	1		
245,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
245,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
245,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
245,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
245,6	Test and commission the installation	No.	1		
246	Next to old Fire				
246,1	Decommission and remove the existing water meter.	No.	1		
246,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
246,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
246,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
246,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
246,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
247	FFS New Buildings				
247,1	Decommission and remove the existing water meter.	No.	2		
247,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	2		
247,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	2		
247,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	2		
247,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	2		
247,6	Test and commission the installation	No.	2		
248	Security bldg (Quay 500) new meter				
248,1	Decommission and remove the existing water meter.	No.	1		
248,2	Supply and install a new 20 mm water meter compatible with AMR technology including all necessary fittings, couplings, sealants etc.	No.	1		
248,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
248,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
248,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
248,6	Test and commission the installation	No.	1		
249	Ams Construction (Ocean Road)				
249,1	Decommission and remove the existing water meter.	No.	1		
249,2	Supply and install a new 50 mm water meter compatible with AMR technology including all necessary fittings, couplings, bolts, sealants etc.	No.	1		
249,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
249,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
249,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
249,6	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY CPT				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	SUPPLY AND INSTALLATION OF SMART ELECTRICITY METERS				
C	Replacement of energy meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVArh/MVArh), Apparent energy (kVAh/MVAh) etc.,				
1,1	Decommission and remove the existing Electricity Meters in various locations	No.	160		
1,2	Supply and Install Metering panels for substations.	No.	36		
1,3	Supply, install and configure a new Smart Electricity Meter with all the necessary comms required (communication module, GSM antenna etc.),	No.	160		
1,4	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs.	No.	160		
1,5	Test and commission the installation.	No.	160		
	CARRIED FORWARD TO SUMMARY CPT				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Supply and install signal repeaters to be linked to closest meters and gateway.	No.	20		
1,2	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	13000		
1,3	Excavate and backfill where depth is not exceeding 2m deep	m ³	2340		
1,4	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	13000		
1,5	Reinstate existing surface and make good	m ²	3900		
1,6	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	15		
1,7	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	15		
1,8	Supply and install a 9U swing frame cabinet 900mm deep	No.	10		
1,9	Design and construction of Manholes for fibre	No.	10		
1,10	Supply, install and setup the servers	No.	2		
1,11	Splicing of Fibres	No.	360		
1,12	OTDR Testing (Test and submit line losses)	No.	360		
1,13	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,14	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it.	No.	1		
1,15	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY CPT				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	3		
1,2	Smart automatic energy meter reading devices	No.	26		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY CPT				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
	Metering gateways				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data. I	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilites management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP ERP.	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation.	Sum	1		
1,4	Testing and commissioning of the software side both individu	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY CPT				

PORT OF CAPE TOWN		
	DESCRIPTION	AMOUNT
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF SALDANHA				
	<u>PREAMBLES</u>				
	Fixed preliminary items will be valuated and paid on a proven cost basis up to the total value The tenderer is expected to understand the site, restrictions, and scope of work and price only the relevant items within the Preliminaries. All items priced will be assessed in relevance to the contract prior to any payments being made				
A	FIXED-CHARGE ITEMS				
	<u>Contractual Requirements</u>				
1.1	Contractual Requirements: Allow for all contractual obligations in accordance with the NEC3 Engineering and Construction Contract (ECC), including the provision and maintenance of all required performance securities, guarantees, insurances, bonds, warranties, and statutory compliance for the full duration of the Contract.	sum	1		
	Establishment of Facilities on Site				
	Facilities for the Contractor				
1.2	Offices and storage sheds	sum	1		
1.3	Ablution and latrine facilities	sum	1		
1.4	Tools and equipment	sum	1		
1.5	Water supplies, electric power and communications	sum	1		
1.6	Dealing with water	sum	1		
1.7	Access	sum	1		
1.8	Plant	sum	1		
	Other Fixed-charge Obligations:				
1.9	Survey, setting out and preparation of as-built drawings	sum	1		
1.10	Health and Safety Compliance	sum	1		
1.11	Environmental management	sum	1		
	CARRIED FORWARD				

PRELIMINARY AND GENERAL					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
1.12	Security	sum	1		
1.13	Removal of Site Establishment	sum	1		
1.14	Plant	sum	1		
2	TIME-RELATED ITEMS				
	Operation and maintenance of facilities on the Site for duration of construction				
	<u>Facilities for the Engineer</u>				
2.1	Survey assistants and materials	Month	10		
	<u>Facilities for the Contractor</u>				
2.2	Offices and storage sheds	Month	10		
2.3	Ablution and latrine facilities	Month	10		
2.4	Tools and equipment	Month	10		
2.5	Water supplies, electric power and communications	Month	10		
2.6	Dealing with water (Sub-clause 5.5)	Month	10		
2.7	Access (Sub-clause 5.8)	Month	10		
2.8	Plant	Month	10		
	<u>Supervision</u>				
2.9	Supervision for duration of construction	Month	10		
	<u>Other time-related obligations</u>				
2.10	Compliance Occupational Health and Safety Act and Construction Regulations	Month	10		
2.11	Compliance to Environmental Management Plan	Month	10		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	PORT OF SALDANHA				
B	SUPPLY AND INSTALLATION OF SMART METERS				
1.1	Investigations and site assessment (Refer to WI Clauses 4.3)	sum	1		
1.2	Survey and Ground-Penetrating Radar (GPR) Scans on the route for any potential underground services	m ²	31250		
	SITE CLEARANCE, SITEWORKS, ETC.				
	Site Clearance				
1.3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	2500		
	Earthworks				
1.4	Excavate and backfill where depth is not exceeding 2m deep (600mm x 600mm x 600mm)	m ³	53		
	SUPPLY AND INSTALLATION OF SMART WATER METERS				
	Below Ground Installation Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
	METER No. 01 Replacement of the meter including associated components Meter size: 300mm, existing pipe material is u-PVC				
2,1	Decommission and remove the existing above installation.	No.	1		
2,2	Supply and install a 300mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
2,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
2,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
2,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
2,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
2,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 02 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is u-PVC				
3,1	Decommission and remove the existing above installation.	No.	1		
3,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
3,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
3,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
3,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
3,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
3,7	Test and commission the installation	No.	1		
3,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
	METER No. 03 Replacement of the meter including associated components Meter size: 200mm, existing pipe material is u-PVC				
4,1	Decommission and remove the existing above installation.	No.	1		
4,2	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
4,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
4,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
4,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
4,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
4,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 04 Replacement of the meter including associated components Meter size: 50mm, existing pipe material is u-PVC				
5,1	Decommission and remove the existing above installation.	No.	1		
5,2	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
5,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
5,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
5,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
5,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
5,7	Test and commission the installation	No.	1		
	METER No. 05 Replacement of the meter including associated components Meter size: 32mm, existing pipe material is Polycop				
6,1	Decommission and remove the existing above installation.	No.	1		
6,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
6,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
6,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
6,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
6,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
6,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 06 Replacement of the meter including associated components Meter size: 32mm, existing pipe material is Polycop				
7,1	Decommission and remove the existing above installation.	No.	1		
7,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
7,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
7,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
7,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
7,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
7,7	Test and commission the installation	No.	1		
	METER No. 07 Replacement of the meter including associated components Meter size: 32mm, existing pipe material is Polycop				
8,1	Decommission and remove the existing above installation.	No.	1		
8,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
8,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
8,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
8,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
8,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
8,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 08 Replacement of the meter including associated components Meter size: 200mm, existing pipe material is u-PVC				
9,1	Decommission and remove the existing above installation.	No.	1		
9,2	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
9,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
9,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
9,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
9,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
9,7	Test and commission the installation	No.	1		
	METER No. 09 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is HDPE				
10,1	Decommission and remove the existing above installation.	No.	1		
10,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
10,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
10,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
10,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
10,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
10,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				
11					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 10 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is u-PVC				
11,1	Decommission and remove the existing above installation.	No.	1		
11,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
11,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
11,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
11,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
11,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
11,7	Test and commission the installation	No.	1		
	METER No. 11 Replacement of the meter including associated components Meter size: 22mm, existing pipe material is Polycop				
12,1	Decommission and remove the existing above installation.	No.	1		
12,2	Supply and install a 22mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
12,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
12,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
12,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
12,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
12,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				
12					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 14 Replacement of the meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
13,1	Decommission and remove the existing above installation.	No.	1		
13,2	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
13,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
13,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
13,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
13,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
13,7	Test and commission the installation	No.	1		
	METER No. 15 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is u-PVC/HDPE				
14,1	Decommission and remove the existing above installation.	No.	1		
14,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
14,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
14,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
14,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
14,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
14,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER NO. 18 Replacement of the meter including associated components Meter size: 150mm, existing pipe material is Asbestos Cement				
15,1	Decommission and remove the existing above installation.	No.	1		
15,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
15,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
15,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
15,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
15,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
15,7	Test and commission the installation	No.	1		
	METER NO. 19 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is Asbestos Cement				
16,1	Decommission and remove the existing above installation.	No.	1		
16,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
16,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
16,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
16,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
16,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
16,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				
14					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 20 Replacement of the meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
17,1	Decommission and remove the existing above installation.	No.	1		
17,2	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
17,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
17,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
17,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
17,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
17,7	Test and commission the installation	No.	1		
	METER No. 21 Replacement of the meter including associated components Meter size: 50mm, existing pipe material is u-PVC				
18,1	Decommission and remove the existing above installation.	No.	1		
18,2	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
18,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
18,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
18,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
18,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
18,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 22 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is u-PVC				
19,1	Decommission and remove the existing above installation.	No.	1		
19,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
19,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
19,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
19,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
19,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
19,7	Test and commission the installation	No.	1		
	METER No. 23 Replacement of the meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
20,1	Decommission and remove the existing above installation.	No.	1		
20,2	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
20,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
20,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
20,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
20,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
20,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 25 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is Asbestos Cement				
21,1	Decommission and remove the existing above installation.	No.	1		
21,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
21,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
21,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
21,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
21,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
21,7	Test and commission the installation	No.	1		
	METER No. 26 Replacement of the meter including associated components Meter size: 22mm, existing pipe material is Polycop				
22,1	Decommission and remove the existing above installation.	No.	1		
22,2	Supply and install a 22mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
22,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
22,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
22,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
22,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
22,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
	METER NO. 28 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is Asbestos Cement				
23,1	Decommission and remove the existing above installation.	No.	1		
23,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
23,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
23,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
23,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
23,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
23,7	Test and commission the installation	No.	1		
	METER No. 30 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is Asbestos Cement				
24,1	Decommission and remove the existing above installation.	No.	1		
24,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
24,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
24,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
24,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
24,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
24,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 31 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is u-PVC				
25,1	Decommission and remove the existing above installation.	No.	1		
25,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
25,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
25,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
25,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
25,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
25,7	Test and commission the installation	No.	1		
	METER No. 32 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is u-PVC				
26,1	Decommission and remove the existing above installation.	No.	1		
26,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
26,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
26,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
26,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
26,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
26,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
	METER NO. 33 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is u-PVC				
27,1	Decommission and remove the existing above installation.	No.	1		
27,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
27,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
27,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
27,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
27,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
27,7	Test and commission the installation	No.	1		
	METER NO. 35 Replacement of the meter including associated components Meter size: 200mm, existing pipe material is Galvanised Steel				
28,1	Decommission and remove the existing above installation.	No.	1		
28,2	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
28,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
28,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
28,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
28,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
28,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 36 Replacement of the meter including associated components Meter size: 150mm, existing pipe material is Asbestos Cement				
29,1	Decommission and remove the existing above installation.	No.	1		
29,2	Supply and install a 150mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
29,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
29,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
29,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
29,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
29,7	Test and commission the installation	No.	1		
	METER No. 37 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is Asbestos Cement				
30,1	Decommission and remove the existing above installation.	No.	1		
30,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
30,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
30,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
30,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
30,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
30,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER NO. 40 Replacement of the meter including associated components Meter size: 100mm, existing pipe material is Asbestos Cement				
31,1	Decommission and remove the existing above installation.	No.	1		
31,2	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
31,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
31,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
31,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
31,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
31,7	Test and commission the installation	No.	1		
	METER NO. 43 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is Steel				
32,1	Decommission and remove the existing above installation.	No.	1		
32,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
32,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
32,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
32,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
32,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
32,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
	METER No. 44 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is Steel				
33,1	Decommission and remove the existing above installation.	No.	1		
33,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
33,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
33,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
33,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
33,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
33,7	Test and commission the installation	No.	1		
	METER No. 45 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is Steel				
34,1	Decommission and remove the existing above installation.	No.	1		
34,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
34,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
34,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
34,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
34,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
34,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 47 Replacement of the meter including associated components Meter size: 32mm, existing pipe material is Polycop				
35,1	Decommission and remove the existing above installation.	No.	1		
35,2	Supply and install a 32mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
35,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
35,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
35,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
35,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
35,7	Test and commission the installation	No.	1		
	METER NO. 49 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is u-PVC				
36,1	Decommission and remove the existing above installation.	No.	1		
36,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
36,3	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
36,4	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
36,5	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
36,6	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
36,7	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	Above Ground Installation				
	Supply, install, test and commission smart water meters and shall be configured for measurement of water consumption (KL), alarm notification for high flow set points and trigger night flow analysis				
	METER No. 27 Replacement of the meter including associated components Meter size: 22mm, existing pipe material is Polycop				
37,1	Decommission and remove the existing installation.	No.	1		
37,2	Supply and install a 22mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
37,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
37,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
37,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
37,6	Test and commission the installation	No.	1		
	METER No. 29 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is Steel				
38,1	Decommission and remove the existing installation.	No.	1		
38,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
38,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
38,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
38,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
38,6	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 46 Replacement of the meter including associated components Meter size: 75mm, existing pipe material is Steel				
39,1	Decommission and remove the existing installation.	No.	1		
39,2	Supply and install a 75mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
39,3	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
39,4	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
39,5	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
39,6	Test and commission the installation	No.	1		
39,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
	CARRIED FORWARD				
27					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 13 Installation of New meter including associated components Meter size: 200mm, existing pipe material is u-PVC				
40,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
40,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
40,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
40,4	Supply and install 200mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
40,5	Supply and install 200mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
40,6	Supply and install a 200mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
40,7	Supply and install a 200mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
40,8	Supply and install a 200mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
40,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
40,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
40,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
40,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
40,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 16 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
41,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
41,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
41,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
41,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
41,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
41,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
41,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
41,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
41,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
41,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
41,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
41,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
41,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 17 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
42,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
42,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
42,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
42,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
42,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
42,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
42,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
42,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
42,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
42,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
42,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
42,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
42,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 34 Installation of New meter including associated components Meter size: 110mm, existing pipe material is u-PVC				
43,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
43,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
43,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
43,4	Supply and install 110mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
43,5	Supply and install 110mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
43,6	Supply and install a 110mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
43,7	Supply and install a 110mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
43,8	Supply and install a 110mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
43,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
43,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
43,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
43,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
43,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER NO. 38 Installation of New meter including associated components Meter size: 50mm, existing pipe material is u-PVC				
44,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
44,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
44,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
44,4	Supply and install 50mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
44,5	Supply and install 50mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
44,6	Supply and install a 50mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
44,7	Supply and install a 50mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
44,8	Supply and install a 50mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
44,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
44,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
44,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
44,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
44,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER NO. 39 Installation of New meter including associated components Meter size: 50mm, existing pipe material is HDPE				
45,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
45,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
45,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
45,4	Supply and install 40mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
45,5	Supply and install 40mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
45,6	Supply and install a 40mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
45,7	Supply and install a 40mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
45,8	Supply and install a 40mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
45,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
45,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
45,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
45,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
45,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER NO. 41 Installation of New meter including associated components Meter size: 100mm, existing pipe material is Asbestos Cement				
46,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
46,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
46,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
46,4	Supply and install 100mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
46,5	Supply and install 100mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
46,6	Supply and install a 100mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
46,7	Supply and install a 100mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
46,8	Supply and install a 100mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
46,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
46,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
46,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
46,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
46,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 42 Installation of New meter including associated components Meter size: 110mm, existing pipe material is u-PVC				
47,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
47,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
47,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
47,4	Supply and install 110mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
47,5	Supply and install 110mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
47,6	Supply and install a 110mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
47,7	Supply and install a 110mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
47,8	Supply and install a 110mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
47,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
47,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
47,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
47,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
47,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 48 Installation of New meter including associated components Meter size: 160mm, existing pipe material is u-PVC				
48,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
48,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
48,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
48,4	Supply and install 160mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
48,5	Supply and install 160mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
48,6	Supply and install a 160mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
48,7	Supply and install a 160mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
48,8	Supply and install a 160mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
48,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
48,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
48,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
48,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
48,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				
28					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				R -
	METER No. 50 Installation of New meter including associated components Meter size: 110mm, existing pipe material is u-PVC				
49,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
49,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
49,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
49,4	Supply and install 110mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
49,5	Supply and install 110mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
49,6	Supply and install a 110mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
49,7	Supply and install a 110mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
49,8	Supply and install a 110mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
49,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
49,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
49,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
49,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
49,13	Test and commission the installation	No.	1		
	CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
	METER No. 51 Installation of New meter including associated components Meter size: 110mm, existing pipe material is u-PVC				
50,1	Proof trench and verify the pipe material, depth and pipe size before procuring any material for the installation.	m ³	5		
50,2	Cutting off approximately 4.5m of pipe including fitting of flanges on both ends of exposed pipe as per drawings and specifications	m	4,5		
50,3	Construct a new water meter manhole with overall size 2.66m x 1.66m and varying depths not exceeding 2.53m deep including all necessary additional excavations, risk of collapse, blinding, manhole base, stone bedding, 230mm brickwork, backfilling, concrete cover slab, including breaking openings on both ends for new pipe and cart away of surplus material all in accordance with drawings and specifications.	No.	1		
50,4	Supply and install 110mm diameter steel pipes each approximately 1.4m in length, flanged on both ends and fitted on either end of manhole to existing flanged asbestos pipes and in new manholes including sealing off ends of manholes, support/thrust blocks, etc., gaskets, bolts, sealants etc.	No.	2		
50,5	Supply and install 110mm spool pieces in varying lengths flanged on both ends and fitted to meter, strainer & valve including all necessary, gaskets, bolts, sealants etc.	No.	2		
50,6	Supply and install a 110mm swing check valve flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
50,7	Supply and install a 110mm In-line strainer, flanged on both ends and fitted to new flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
50,8	Supply and install a 110mm water meter compatible with AMR technology, flanged on both ends and fitted to new-flanged pipes including all necessary gaskets, bolts, sealants etc.	No.	1		
50,9	Pipes underground to be taped shall be coated with appropriate primer and the tape shall be applied with minimum 15mm lap per spiral	m	8		
50,10	Supply, install, mount and configure a smart IP68 automatic data logger and meter-reading device and establish connectivity for wireless communication.	No.	1		
50,11	Register the meter on both the billing server and the new Utility Management System with appropriate tagging	No.	1		
50,12	Create an account and link the meter to the account and apply the appropriate tariffs	No.	1		
50,13	Test and commission the installation	No.	1		
	CARRIED FORWARD TO SUMMARY SLD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
SUPPLY AND INSTALLATION OF SMART ELECTRICITY METER READING DEVICES					
C	Replacement of energy meters in various locations (Three Phase)				
	Supply, install, configure, test and commission Smart Electricity Meters for measurement of different electrical parameters listed elsewhere in the document including Active energy (kWh/MWh), Reactive energy (kVArh/MVArh), Apparent energy (kVAh/MVAh) etc.,				
1,1	Decommission and remove the existing Electricity Meters in various locations	No.	2		
1,2	Supply and Install Current Transformer for Medium Voltage feeders.	No.	39		
1,3	Supply, install and configure a new smart energy meter with all the necessary comms required (communication module, GSM antenna etc.),	No.	13		
1,4	Establish connectivity: Link the meters to the billing server and the new Utilities Management System, Create Accounts and apply the tariffs.	No.	18		
1,5	Test and commission the installation.	No.	18		
	CARRIED FORWARD TO SUMMARY SLD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
D	COMMUNICATION				
1,1	Standalone Fibre Network - Design, supply, install and patch 48 pair single mode fibre optic cable (652D)	m	10000		
1,2	Excavate and backfill where depth is not exceeding 2m deep	m ³	1800		
1,3	Supply and install 110mm PVC pipe and chamber system for the fibre.	m	10000		
1,4	Reinstate exsiting surface and make good	m ²	3000		
1,5	Supply and install patch panels fully populated 48 pair with Lucent Connector (LC) patch leads	No.	10		
1,6	Supply and install a media converter	No.	12		
1,7	Supply, install and configure 24 ports managed enterprise network switches including routing and setting up VLANs	No.	10		
1,8	Supply and install a 9U swing frame cabinet 900mm deep	No.	10		
1,9	Design and construction of Manholes for fibre	No.	10		
1,10	Supply, install and setup the severs	No.	2		
1,12	Splicing of Fibres	No.	240		
1,13	OTDR Testing (Test and submit line losses)	No.	240		
1,14	Supply, install, configure and commission a Firewall for LAN, ensure that old and new services going through the Firewall are reinstated. Setup DMZ and position a management workstation within DMZ	Sum	1		
1,15	Supply and install management workstation desktops and link to TNPA corporate network. Setup rules for management workstation and provide dashboards whilst second LAN on machine connects to Transnet Data Network. Management station needs to be on Transnet domain and have relative Transnet Policies applied to it	No.	1		
1,16	Supply and install the latest Microsoft SQL server (permanent license)	No.	2		
	CARRIED FORWARD TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	BROUGHT FORWARD				
E	PROCUREMENT AND SUPPLY OF SPARES				
1,1	Smart automatic water meter reading devices	No.	52		
1,2	Smart automatic energy meter reading devices	No.	19		
1,3	Supply hand held automatic meter reading device (water & energy)	No.	2		
	CARRIED FORWARD TO SUMMARY SLD				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION				
	Metering gateways				
1,1	Supply, installation, configure and integrate the metering gateways onto the LAN and utilities management system for uploading water meter data. Including civil and structural works and all appurtenances	No.	5		
1,2	New Utilities Management System Development, Programming and Software integration into the billing server, tariff setup, designing billing template and setting up billing accounts on billing server. Configure the server to send an Alert (SMS) to TNPA for abnormalities. Including linking all Port meters to new utilities management system. Provide license package. Develop an API and link it to the back end of IPMS and SAP ERP	Sum	1		
1,3	Mapping the meters onto the Geographic Information System (GIS) showing the exact installation point, opening meter reading and the picture of the installation.	Sum	1		
1,4	Testing and commissioning of the software side both individ	Sum	1		
1,5	AMR Training for End Users	Sum	1		
	CARRIED FORWARD TO SUMMARY SLD				

PORT OF SALDANHA		
	DESCRIPTION	AMOUNT R
A	PRELIMINARIES AND GENERALS	
B	SUPPLY AND INSTALLATION OF SMART AUTOMATIC WATER METER READING DEVICES	
C	SUPPLY AND INSTALLATION OF SMART AUTOMATIC ENERGY METER READING DEVICES	
D	COMMUNICATION	
E	PROCUREMENT AND SUPPLY OF SPARES	
F	AUTOMATIC METER READING (AMR) SYSTEM AND SOFTWARE INTEGRATION	
TOTAL CARRIED FORWARD TO SUMMARY PAGE:		