C2.1: PRICING INSTRUCTIONS

C2.1.1 PREAMBLE TO THE BILL OF QUANTITIES

C2.1.1.1 The method of measurement published by the South African Bureau of Standards in Clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SABS 1200 standardised specifications".

C2.1.1.2 Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised or Scope of Work, as applicable, shall prevail.

C2.1.1.3 The clauses in a specification in which further information regarding the bill item can be obtained appear under "Reference clause" in the Schedule. The reference clauses indicated are not necessarily the only sources of information in respect of schedule items. Further information and set specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, e.g. G for SABS 1200 G.

C2.1.1.4 Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for waste.

C2.1.1.5 The quantities set out in the Bill of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Engineer from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

C2.1.1.6 The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

C2.1.1.7 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be consideredto be covered by the other prices or rates in the Bill of Quantities.

C2.1.1.8 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.

C2.1.1.9 The units of measurement described in the Bill of Quantities are metric units.

Abbreviations used in the Bill of Quantities are as follows :

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1 000 kg)
m^2	=	square metre	No.	=	number
m^2.pass	=	square metre-pass	sum	=	lumpsum
ha	=	hectare	MN	=	MegaNewton
m3.km	=	cubic metre-kilometre	P C sum	=	Prime Cost sum
ℓ	=	litre	Prov sum	=	Provisional sum
kℓ	=	kilolitre	%	=	per cent
MPa	=	MegaPascal	kW	=	kilowatt

DECLARATION

I, THE UNDERSIGNED (NAME) .....

CERTIFICATE THAT THE INFORMATION FURNISHED ABOVE IS CORRECT. I ACCEPT THAT THE MUNICIPALITY MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

AUTHORISED SIGNATURE: .....

NAME: .....

CAPACITY: .....

DATE: .....

HESSEQUA MUNICIPALITY

HES-TECH 26/2122

MAINTENANCE AND INSTALLATION OF PUMPS, MIXERS AND ELECTRICAL MOTORS IN THE HESSEQUA MUNICIPAL AREA FOR A PERIOD OF THREE (3) YEARS

C2.2: BILL OF QUANTITIES

Item	Description	Unit	Qty	Material	Labour	Amount
D1	**Part 1 - General**					
2	**Dayworks Schedule**					
2.1	**Labour: Normal Time (07:00 - 16:59, Mon-Friday)**					
a	Mechanical Artisan/Pump Fitter	Hr				R0.00
b	Qualified Electrician	Hr				R0.00
c	General Worker/Assistant	Hr				R0.00
2.2	**Labour: Normal Overtime (17:00 - 06:59, Mon-Friday; 00:00 - 23:59 Sat)**					
a	Mechanical Artisan/Pump Fitter	Hr				R0.00
b	Qualified Electrician	Hr				R0.00
c	General Worker/Assistant	Hr				R0.00
2.3	**Labour: Sundays and Public holidays (00:00 - 23:59)**					
a	Mechanical Artisan/Pump Fitter	Hr				R0.00
b	Qualified Electrician	Hr				R0.00
c	General Worker/Assistant	Hr				R0.00
2.5	**Compilation and Submission of Workshop Drawings**					
a	Mechanical Pipework drawing	Each				R0.00
b	Electrical MCC layout and single line diagram	Each				R0.00
3	**Scope of Services (Including plant, labour, disposal required in Hessequa)- During Normal hours**					
3.1	**Removal, Inspection and Reporting on the Status of Equipment**					
a	For pump sets rated at 30kW and smaller:	Each				R0.00
c	For pump sets ratedat 31kW and larger:	Each				R0.00

3.2	Unblocking and cleaning of sewage pumping and related equipment					
a	For pump sets rated at 30kW and smaller:	Each				R0.00
b	For pump sets rated at 31kW and larger:	Each				R0.00
4	**Submission of Workshop Drawings:**					
4.1	Mechanical Plant and Pipework drawing	Each				R0.00
4.2	Electrical MCC layout and single line diagram	Each				R0.00
5	**"Special Projects" Works Packages to be made up of labour and travel rates**					
5.1	**Gearboxes: Percentage mark-up on parts supplied, based on electrical driver size (percentage to be provided)**					
a	Gearbox (≤15kW rated)	%				R0.00
b	Gearbox (>15kW, ≤50kW rated)	%				R0.00
c	Gearbox (>50kW rated)	%				R0.00
5.2	**Aerators / Mixers: Percentage mark-up on parts supplied, based on electrical driver size (percentage to be provided)**					
a	Aerators (≤15kW rated)	%				R0.00
b	Aerators (>15kW, ≤50kW rated)	%				R0.00
c	Aerators (>50kW rated)	%				R0.00
d	Mixers (≤10kW rated)	%				R0.00
5.3	Mechanical/Automated Screens: Percentage mark-up on parts supplied (percentage to be provided)	%				R0.00
5.4	Sluice gates / Penstocks / Overflow Weirs: Percentage mark-up on parts supplied (percentage to be provided)	%				R0.00
5.5	Macerators: Percentage mark-up on parts supplied (percentage to be provided)	%				R0.00
5.6	Dosing Pumps; Percentage mark-up on parts supplied (percentage to be provided)	%				R0.00
5.7	Odour Control Equipment and Services: Percentage mark-up on parts supplied (percentage to be provided)	%				R0.00
D2	**Part 2 - Mechanical (Including plant, labour, Factory Testing, Commissioning, Training, O&M Manuals, required within Hessequa)**					
1	**Repair of Existing Equipment:**					

1.1	**Pumps: Percentage mark-up on parts supplied, based on electrical driver size (percentage to be provided)**					
a	Submersible pumps (≤15kW rated)	%				R0.00
b	Submersible pumps (>15kW, ≤50kW rated)	%				R0.00
c	Submersible pumps (>50kW rated)	%				R0.00
d	Self-priming pumps (≤15kW rated)	%				R0.00
e	Self-priming pumps (>15kW, ≤50kW rated)	%				R0.00
f	Self-priming pumps (>50kW rated)	%				R0.00
g	End-suction pumps (≤15kW rated)	%				R0.00
h	End-suction pumps (>15kW, ≤50kW rated)	%				R0.00
i	End-suction pumps (>50kW rated)	%				R0.00
1.2	**Pumps: Labour, remove, clean, strip, repair, reinstall, commission and test**					
a	Submersible pumps (≤15kW rated)	Each				R0.00
b	Submersible pumps (>15kW, ≤50kW rated)	Each				R0.00
c	Submersible pumps (>50kW rated)	Each				R0.00
d	Self-priming pumps (≤15kW rated)	Each				R0.00
e	Self-priming pumps (>15kW, ≤50kW rated)	Each				R0.00
f	Self-priming pumps (>50kW rated)	Each				R0.00
g	End-suction pumps (≤15kW rated)	Each				R0.00
h	End-suction pumps (>15kW, ≤50kW rated)	Each				R0.00
i	End-suction pumps (>50kW rated)	Each				R0.00
1.3	**Additional Services for pumps:**					
a	Trimming of impeller to suit	Each				R0.00
b	Balancing of rotating assembly	Each				R0.00
c	Laser alignment	Each				R0.00
1.4	**Electrical Motors: Percentage mark-up on parts supplied, based on electrical driver size (percentage to be provided)**					
a	Submersible motor (≤15kW rated)	%				R0.00
b	Submersible motor (>15kW, ≤50kW rated)	%				R0.00
c	Submersible motor (>50kW rated)	%				R0.00
d	TEFC motor (<15kW rated)	%				R0.00
e	TEFC motor (>15kW, <50kW rated)	%				R0.00
f	TEFC motor (>51kW rated)	%				R0.00
1.5	**Repair of Motors: (Labour, remove, clean, strip, repair, reinstall, commission and test)**					

a	Rewind of motor - submersible (≤15kW rated)	Each				R0.00
b	Rewind of motor - submersible (>15kW, ≤50kW rated)	Each				R0.00
c	Rewind of motor - submersible (>50kW rated)	Each				R0.00
d	Rewind of motor - TEFC (≤15kW rated)	Each				R0.00
e	Rewind of motor - TEFC (>15kW, ≤55kW rated)	Each				R0.00
f	Rewind of motor - TEFC (>55kW, ≤132kW rated)	Each				R0.00
g	Rewind of motor - TEFC (>132kW rated)	Each				R0.00
h	Baking of motor (≤15kW rated)	Each				R0.00
i	Baking of motor (>15kW, ≤50kW rated)	Each				R0.00
j	Baking of motor (>50kW rated)	Each				R0.00
1.6	**I-beam Gantries and General Steel Work**					
1.6.1	**Cost for labour, plant and material required for refurbishment of corrosion protection coating (base on corrosive environment)**					
a	Dry conditions - Low to medium corrosive environment	m²				R0.00
b	Dry conditions - high corrosive environment	m²				R0.00
c	Wet conditions - Fresh - and sea water	m²				R0.00
2	**Supplying and Installation:**					
2.1	**Supply and installation of new Submersible pump sets, complete with wet end, submersible motor, pump motor and signal cables, to suit the following duty and characteristics:**					
a	Nominal duty point at BEP: 9l/s @ 10m Nominal shut-off head: 16m Nominal run-out duty point: 15l/s @ 4m Minimum solids handling: 65mm	Each				R0.00
b	Nominal duty point at BEP: 11l/s @ 12m Nominal shut-off head: 20m Nominal run-out duty point: 18l/s @ 4m Minimum solids handling:65mm	Each				R0.00
c	Nominal duty point at BEP: 20l/s @ 6m Nominal shut-off head: 10m Nominal run-out duty point: 28l/s @ 4m Minimum solids handling: 80mm	Each				R0.00

d	Nominal duty point at BEP: 19l/s @ 7m Nominal shut-off head: 11.5m Nominal run-out duty point: 35l/s @ 2m Minimum solids handling: 80mm	Each				R0.00
e	Nominal duty point at BEP: 20l/s @ 4.5m Nominal shut-off head: 10m Nominal run-out duty point: 30l/s @ 2m Minimum solids handling: 100mm	Each				R0.00
f	Nominal duty point at BEP: 12l/s @ 40m Nominal shut-off head: 48m Nominal run-out duty point: 14l/s @ 39m Minimum solids handling: 65mm	Each				R0.00
g	Nominal duty point at BEP: 12l/s @ 15m Nominal shut-off head: 24.5m Nominal run-out duty point: 22l/s @ 5m Minimum solids handling: 65mm	Each				R0.00
h	Nominal duty point at BEP: 24l/s @ 9m Nominal shut-off head: 14m Nominal run-out duty point: 40l/s @ 3m Minimum solids handling: 80mm	Each				R0.00
i	Nominal duty point at BEP: 30l/s @ 10m Nominal shut-off head: 17m Nominal run-out duty point: 42l/s @ 4m Minimum solids handling: 80mm	Each				R0.00
j	Nominal duty point at BEP: 20l/s @ 17.5m Nominal shut-off head: 31m Nominal run-out duty point: 31l/s @ 9m Minimum solids handling: 80mm	Each				R0.00
k	Nominal duty point at BEP: 22l/s @ 22m Nominal shut-off head: 35m Nominal run-out duty point: 40l/s @ 7m Minimum solids handling: 80mm	Each				R0.00
l	Nominal duty point at BEP: 22l/s @ 7m Nominal shut-off head: 13m Nominal run-out duty point: 33l/s @ 4m Minimum solids handling: 100mm	Each				R0.00
m	Nominal duty point at BEP: 25l/s @ 13.5m Nominal shut-off head: 18m Nominal run-out duty point: 48l/s @ 4m Minimum solids handling: 100mm	Each				R0.00
n	Nominal duty point at BEP: 25l/s @ 29m Nominal shut-off head: 43m Nominal run-out duty point: 38l/s @ 16m Minimum solids handling: 80mm	Each				R0.00

o	Nominal duty point at BEP: 28l/s @ 40m Nominal shut-off head: 52m Nominal run-out duty point: 38l/s @ 30m Minimum solids handling: 80mm	Each				R0.00
p	Nominal duty point at BEP: 30l/s @ 70m Nominal shut-off head: 80m Nominal run-out duty point: 35l/s @ 65m Minimum solids handling: 80mm	Each				R0.00
q	Nominal duty point at BEP: 50l/s @ 45m Nominal shut-off head: 70m Nominal run-out duty point: 56l/s @ 42m Minimum solids handling: 80mm	Each				R0.00
r	Nominal duty point at BEP: 50l/s @ 30m Nominal shut-off head: 35m Nominal run-out duty point: 70l/s @ 27m Minimum solids handling: 100mm	Each				R0.00
s	Percentage mark-up on supply and installation of new pump not listed above, value of pump less than R 50 000-00 (percentage to be provided)	%				R0.00
t	Percentage mark-up on supply and installation of new pump not listed above, value of pump more than R 50 001-00, less than R 100 000-00 (percentage to be provided)	%				R0.00
u	Percentage mark-up on supply and installation of new pump not listed above, value of pump more than R 100 001-00, less than R 200 000-00 (percentage to be provided)	%				R0.00
v	Percentage mark-up on supply and installation of new pump not listed above, value of pump more than R 200 001-00 (percentage to be provided)	%				R0.00
2.2	**Supply and installation of Self-Priming pump, complete with wet end, belt drive, coupling guard, air-release valve and base plate, to suit the following duty and characteristics:**					
a	Nominal duty point at BEP: 24l/s @ 28m Nominal shut-off head: 40m Nominal run-out duty point: 28l/s @ 26m Minimum solids handling: 60mm	Each				R0.00
b	Nominal duty point at BEP: 36l/s @ 29m Nominal shut-off head: 40m Nominal run-out duty point: 45l/s @ 25m Minimum solids handling: 75mm	Each				R0.00
c	Nominal duty point at BEP: 70l/s @ 24m Nominal shut-off head: 37m Nominal run-out duty point: 92l/s @ 18m Minimum solids handling: 75mm	Each				R0.00

d	Nominal duty point at BEP: 120l/s @ 24m Nominal shut-off head: 39m Nominal run-out duty point: 170l/s @ 14m Minimum solids handling: 75mm	Each				R0.00
e	Nominal duty point at BEP: 180l/s @ 30m Nominal shut-off head: 46m Nominal run-out duty point: 215l/s @ 24m Minimum solids handling: 76mm	Each				R0.00
f	Percentage mark-up on supply of new pump not listed above, value of pump less than R 50 000-00 (percentage to be provided)	%				R0.00
g	Percentage mark-up on supply of new pump not listed above, value of pump more than R 50 001-00, less than R 100 000-00 (percentage to be provided)	%				R0.00
h	Percentage mark-up on supply of new pump not listed above, value of pump more than R 100 001-00, less than R 200 000-00 (percentage to be provided)	%				R0.00
i	Percentage mark-up on supply of new pump not listed above, value of pump more than R 200 001-00 (percentage to be provided)	%				R0.00
2.3	**Supply of End-suction pump, complete with wet end, coupling, coupling guard and base plate, to suit the following duty and characteristics:**					
a	Percentage mark-up on supply and installation of new pump not listed above, value of pump less than R 50 000-00 (percentage to be provided)	%				R0.00
b	Percentage mark-up on supply and installation of new pump not listed above, value of pump more than R 50 001-00, less than R 100 000-00 (percentage to be provided)	%				R0.00
c	Percentage mark-up on supply and installation of new pump not listed above, value of pump more than R 100 001-00, less than R 200 000-00 (percentage to be provided)	%				R0.00
d	Percentage mark-up on supply and installation of new pump not listed above, value of pump more than R 200 001-00 (percentage to be provided)	%				R0.00

2.4	**Supply and installation of Electrical motors, 400V, 3-phase, 2-pole, IE3 TEFC (Normal Duty Rating):**					
a	1.1kW	Each				R0.00
b	1.5kW	Each				R0.00
c	2.2kW	Each				R0.00
d	3kW	Each				R0.00
e	4kW	Each				R0.00
f	5.5kW	Each				R0.00
g	7.5kW	Each				R0.00
h	9kW	Each				R0.00
i	11kW	Each				R0.00
j	15kW	Each				R0.00
k	18.5kW	Each				R0.00
l	22kW	Each				R0.00
m	30kW	Each				R0.00
n	45kW	Each				R0.00
o	55kW	Each				R0.00
p	75kW	Each				R0.00
q	90kW	Each				R0.00
r	110kW	Each				R0.00
s	132kW	Each				R0.00
t	160kW	Each				R0.00
u	185kW	Each				R0.00
v	200kW	Each				R0.00
w	220kW	Each				R0.00
x	250kW	Each				R0.00
y	300kW	Each				R0.00
2.5	**Supply and installation of Electrical motors, 400V, 3-phase, 4-pole, IE3 TEFC (Normal Duty Rating):**					
a	1.1kW	Each				R0.00
b	1.5kW	Each				R0.00
c	2.2kW	Each				R0.00
d	3kW	Each				R0.00
e	4kW	Each				R0.00
f	5.5kW	Each				R0.00
g	7.5kW	Each				R0.00
h	9kW	Each				R0.00
i	11kW	Each				R0.00
j	15kW	Each				R0.00
k	18.5kW	Each				R0.00
l	22kW	Each				R0.00
m	30kW	Each				R0.00

n	45kW	Each				R0.00
o	55kW	Each				R0.00
p	75kW	Each				R0.00
q	90kW	Each				R0.00
r	110kW	Each				R0.00
s	132kW	Each				R0.00
t	160kW	Each				R0.00
u	185kW	Each				R0.00
v	200kW	Each				R0.00
w	220kW	Each				R0.00
x	250kW	Each				R0.00
y	300kW	Each				R0.00
2.6	**Supply and installation of Electrical motors, 400V, 3-phase, 6-pole, IE3 TEFC (Normal Duty Rating):**					
a	1.1kW	Each				R0.00
b	1.5kW	Each				R0.00
c	2.2kW	Each				R0.00
d	3kW	Each				R0.00
e	4kW	Each				R0.00
f	5.5kW	Each				R0.00
g	7.5kW	Each				R0.00
h	9kW	Each				R0.00
i	11kW	Each				R0.00
j	15kW	Each				R0.00
k	18.5kW	Each				R0.00
l	22kW	Each				R0.00
m	30kW	Each				R0.00
n	45kW	Each				R0.00
o	55kW	Each				R0.00
p	75kW	Each				R0.00
q	90kW	Each				R0.00
r	110kW	Each				R0.00
s	132kW	Each				R0.00
t	160kW	Each				R0.00
u	185kW	Each				R0.00
v	200kW	Each				R0.00
w	220kW	Each				R0.00
x	250kW	Each				R0.00
y	300kW	Each				R0.00
2.7	**Supply and installation of Submersible pump ancillaries, complete to suite the supplied pump set:**					
a	Duckfoot bend - DN50	Each				R0.00

b	Duckfoot bend - DN65	Each				R0.00
c	Duckfoot bend - DN80	Each				R0.00
d	Duckfoot bend - DN100	Each				R0.00
e	Duckfoot bend - DN150	Each				R0.00
f	Duckfoot bend - DN200	Each				R0.00
g	Guide rails (SS316), pair, to suit ND50 duckfoot bend, 6m long	Each				R0.00
h	Guide rails (SS316), pair, to suit ND65 duckfoot bend, 6m long	Each				R0.00
i	Guide rails (SS316), pair, to suit ND80 duckfoot bend, 6m long	Each				R0.00
j	Guide rails (SS316), pair, to suit ND100 duckfoot bend, 6m long	Each				R0.00
k	Guide rails (SS316), pair, to suit ND150 duckfoot bend, 6m long	Each				R0.00
l	Guide rails (SS316), pair, to suit ND200 duckfoot bend, 6m long	Each				R0.00
m	Guide rail top bracket to suit DN50 duckfoot bend	Each				R0.00
n	Guide rail top bracket to suit DN65 duckfoot bend	Each				R0.00
o	Guide rail top bracket to suit DN80 duckfoot bend	Each				R0.00
p	Guide rail top bracket to suit DN100 duckfoot bend	Each				R0.00
q	Guide rail top bracket to suit DN150 duckfoot bend	Each				R0.00
r	Guide rail top bracket to suit DN200 duckfoot bend	Each				R0.00
s	Lifting Chain, SS316, 6mm	m				R0.00
t	Lifting Chain, SS316, 8mm	m				R0.00
u	Lifting Chain, SS316, 10mm	m				R0.00
2.11.2	**Gylcerine filled Pressure Gauge, complete with high pressure hose, isolating cock, with suitable pressure range**					
a	-50 kPa - 200 kPa	Each				R0.00
b	0 kPa - 250 kPa	Each				R0.00
c	0 kPa - 500 kPa	Each				R0.00
d	0 kPa - 750 kPa	Each				R0.00
e	0 kPa - 1000 kPa	Each				R0.00
f	0 kPa - 1600 kPa	Each				R0.00
g	0 kPa - 2500 kPa	Each				R0.00

2.11.3	**Gylcerine filled Pressure Gauge suitable for raw sewage, complete with high pressure hose, isolating cock, with suitable pressure range**					
a	0 kPa - 250 kPa	Each				R0.00
b	0 kPa - 500 kPa	Each				R0.00
c	0 kPa - 750 kPa	Each				R0.00
d	0 kPa - 1000 kPa	Each				R0.00
e	0 kPa - 1600 kPa	Each				R0.00
f	0 kPa - 2500 kPa	Each				R0.00
2.11.4	**HDG Pressure gauge stand, to suite:**					
a	One pressure gauge	Each				R0.00
b	Two pressure guages	Each				R0.00
2.11.5	**Lifting Equipment: Chain block / hoist, complete with SWL:**					
a	500kg SWL	Each				R0.00
b	1000kg SWL	Each				R0.00
c	1500kg SWL	Each				R0.00
d	2000kg SWL	Each				R0.00
e	3000kg SWL	Each				R0.00
f	5000kg SWL	Each				R0.00
2.11.6	**Lifting Equipment: Geared trolley, complete to fit I-Beam with SWL:**					
a	500kg SWL	Each				R0.00
b	1000kg SWL	Each				R0.00
c	1500kg SWL	Each				R0.00
d	2000kg SWL	Each				R0.00
e	3000kg SWL	Each				R0.00
f	5000kg SWL	Each				R0.00
D3	**Part 3 - Electrical and Instrumentation (Including plant, labour, Factory Testing, Commissioning required within Hessequa area)**					
1	**Motor Control Centres (MCCs)**					
	Design, supply, install and commission a new MCC, excluding specific components listed in separate sections below					
1.1	**Outdoor MCCs**					
1.1.1	**Material: 3CR12**					
1.1.1.1	**Two-Pump Configuration - 6kA Fault Rating**					

	Duty/Standby pumping configuration, with motor sizes as indicated					
a	2.2kW	Each				R0.00
b	3kW	Each				R0.00
c	5kW	Each				R0.00
d	7.5kW	Each				R0.00
e	9kW	Each				R0.00
f	11kW	Each				R0.00
g	15kW	Each				R0.00
h	22kW	Each				R0.00
i	28kW	Each				R0.00
j	30kW	Each				R0.00
k	37kW	Each				R0.00
l	45kW	Each				R0.00
m	48kW	Each				R0.00
1.1.1.2	**Two-Pump Configuration - 10kA Fault Rating**					
	Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
1.1.1.3	**Three-Pump Configuration - 10kA Fault Rating**					
	2 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
1.1.1.4	**Three-Pump Configuration - 12kA Fault Rating**					
	2 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
1.1.2	**Material: SS304**					
1.1.2.1	**Two-Pump Configuration - 6kA Fault Rating**					
	Duty/Standby pumping configuration, with motor sizes as indicated					
a	2.2kW	Each				R0.00

b	3kW	Each				R0.00
c	5kW	Each				R0.00
d	7.5kW	Each				R0.00
e	9kW	Each				R0.00
f	11kW	Each				R0.00
g	15kW	Each				R0.00
h	22kW	Each				R0.00
i	28kW	Each				R0.00
j	30kW	Each				R0.00
k	37kW	Each				R0.00
l	45kW	Each				R0.00
m	48kW	Each				R0.00
1.1.2.2	**Two-Pump Configuration - 10kA Fault Rating**					
	Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
1.1.2.3	**Three-Pump Configuration - 10kA Fault Rating**					
	2 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
1.1.2.4	**Three-Pump Configuration - 12kA Fault Rating**					
	2 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
1.1.3	Removal of existing outdoor MCC, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
1.2	**Indoor MCCs - 3CR12 Only**					
1.2.1	**Two-Pump Configuration - 10kA Fault Rating**					
	Duty/Standby pumping configuration, with motor sizes as indicated					
a	22kW	Each				R0.00
b	28kW	Each				R0.00

c	30kW	Each				R0.00
d	37kW	Each				R0.00
e	45kW	Each				R0.00
f	48kW	Each				R0.00
1.2.2	**Two-Pump Configuration - 12kA Fault Rating**					
	Duty/Standby pumping configuration, with motor sizes as indicated					
a	55kW	Each				R0.00
b	75kW	Each				R0.00
c	90kW	Each				R0.00
d	110kW	Each				R0.00
1.2.3	**Three-Pump Configuration - 10kA Fault Rating**					
	2 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
d	55kW	Each				R0.00
e	75kW	Each				R0.00
f	90kW	Each				R0.00
g	110kW	Each				R0.00
1.2.4	**Three-Pump Configuration - 12kA Fault Rating**					
	2 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	37kW	Each				R0.00
b	45kW	Each				R0.00
c	48kW	Each				R0.00
d	55kW	Each				R0.00
e	75kW	Each				R0.00
f	90kW	Each				R0.00
g	110kW	Each				R0.00
1.2.5	**Four-Pump Configuration - 12kA Fault Rating**					
	3 x Duty/Standby pumping configuration, with motor sizes as indicated					
a	55kW	Each				R0.00
b	75kW	Each				R0.00
c	90kW	Each				R0.00
d	110kW	Each				R0.00

1.2.6	**Four-Pump Configuration - 17kA Fault Rating** **3 x Duty/Standby pumping configuration, with motor sizes as indicated**					
a	55kW	Each				R0.00
b	75kW	Each				R0.00
c	90kW	Each				R0.00
d	110kW	Each				R0.00
1.2.7	Removal of existing indoor MCC, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
2	**Motor Starters**					
	Design, supply, install, program and commission a new motor starter, in new or existing MCC					
2.1	**Soft Starters (No PFC)** **Normal Duty (ND) rating, with no Power Factor Correction (PFC) required**					
a	2.2kW	Each				R0.00
b	3kW	Each				R0.00
c	5kW	Each				R0.00
d	7.5kW	Each				R0.00
e	9kW	Each				R0.00
f	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
2.2	**Soft Starters (With PFC)** **Normal Duty (ND) rating, with individual Power Factor Correction (PFC) required**					
a	11kW	Each				R0.00
b	15kW	Each				R0.00
c	22kW	Each				R0.00
d	28kW	Each				R0.00
e	30kW	Each				R0.00
f	37kW	Each				R0.00
g	45kW	Each				R0.00
h	48kW	Each				R0.00
i	55kW	Each				R0.00
j	75kW	Each				R0.00
k	90kW	Each				R0.00
l	110kW	Each				R0.00
m	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00

2.3	**Variable Speed Drives (VSDs)**					
	Normal Duty Rating					
a	2.2kW	Each				R0.00
b	3kW	Each				R0.00
c	5kW	Each				R0.00
d	7.5kW	Each				R0.00
e	9kW	Each				R0.00
f	11kW	Each				R0.00
g	15kW	Each				R0.00
h	22kW	Each				R0.00
i	28kW	Each				R0.00
j	30kW	Each				R0.00
k	37kW	Each				R0.00
l	45kW	Each				R0.00
m	48kW	Each				R0.00
n	55kW	Each				R0.00
o	75kW	Each				R0.00
p	90kW	Each				R0.00
q	110kW	Each				R0.00
r	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
3	**PLCs and HMIs**					
	Design, supply, install, program and commission a new control system (hardware and software), in new or existing MCC					
3.1	**PLCs**					
	To be priced complete with in-line UPS and all specified I/O allocation, network and communication protocols					
a	Small PLC unit (DVP20ES200RE)	Each				R0.00
b	Medium PLC unit (DVP40ES200RE)	Each				R0.00
c	Large PLC unit (DVP60ES200RE)	Each				R0.00
d	Expansion 8 x Digital Input I/O module	Each				R0.00
e	Expansion 16 x Digital Input I/O module	Each				R0.00
f	Expansion 8 x Digital Output I/O module	Each				R0.00
g	Expansion 4 x Digital Input & Output I/O combined module	Each				R0.00
h	Expansion 8 x Digital Input & Output I/O combined module	Each				R0.00
i	Expansion 2 x Analogue Input I/O module	Each				R0.00
j	Expansion 4 x Analogue Input I/O module	Each				R0.00

k	Expansion 4 x Analogue Input & 2 x Output I/O combined module	Each				R0.00
l	Separate power supply module	Each				R0.00
m	Programming,*testing and implementation of a two-pump configuration, as per project specifications	Each				R0.00
n	Programming, testing and implementation of a three-pump configuration, as per project specifications	Each				R0.00
o	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
3.2	**HMIs**					
	To be priced complete with iterative configuration approval process and compliance to Client standards					
a	7"	Each				R0.00
b	10"	Each				R0.00
c	15"	Each				R0.00
d	Programming, graphic configuration, testing and implementation of a two-pump configuration, as per project specifications	Each				R0.00
e	Programming, graphic configuration, testing and implementation of a three-pump configuration, as per project specifications	Each				R0.00
4	**Instrumentation**					
	Supply, install and commission new equipment in new and existing sites. Equipment pricing to include all brackets, labeling, connections and adequate cable length for direct MCC termination					
4.1	**Ultrasonic Level Sensors**					
	Controllers to be MCC-mounted, behind window. Controllers to be programmed, based upon site considerations and levels					
a	12m Single-sensor and controller configuration	Each				R0.00
b	12m Double-sensor and controller configuration	Each				R0.00
c	Re-programming of existing unit	Each				R0.00
d	Clean existing sensor in sump	Each				R0.00

e	Clean existing float level switches (set) in sump	Each				R0.00
f	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
4.2	**Electromagnetic Flow Meters Split-type units with controllers mounted in MCC (outdoor), or wall-mounted (indoor). Complete with Modbus, earthing rings and general bonding**					
a	50mm Flanged-type	Each				R0.00
b	80mm Flanged-type	Each				R0.00
c	100mm Flanged-type	Each				R0.00
d	150mm Flanged-type	Each				R0.00
e	200mm Flanged-type	Each				R0.00
f	250mm Flanged-type	Each				R0.00
g	300mm Flanged-type	Each				R0.00
h	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00
4.3	**Pressure Sensors**					
	Socket-mounted unit on pipe, with pricing to include digital display in MCC, with two relay-outputs					
4.3.1	**Water application**					
a	Rated 6-bar	Each				R0.00
b	Rated 10-bar	Each				R0.00
c	Rated 16-bar	Each				R0.00
4.3.2	**Sewerage application**					
a	Rated 6-bar	Each				R0.00
b	Rated 10-bar	Each				R0.00
c	Rated 16-bar	Each				R0.00
4.4	**Pressure Switches**					
	Socket-mounted unit on pipe					
4.4.1	**Water application**					
a	Rated 6-bar	Each				R0.00
b	Rated 10-bar	Each				R0.00
c	Rated 16-bar	Each				R0.00
4.4.2	**Sewerage application**					
a	Rated 6-bar	Each				R0.00
b	Rated 10-bar	Each				R0.00
c	Rated 16-bar	Each				R0.00
5	**Remote Monitoring**					

	Supply, install, program and commission new equipment in new and existing sites. Equipment pricing to include all brackets, labelling, connections and adequate cable length for direct MCC termination, as per specifications					
5.1	**GSM Commander - New MCCs**					
a	Micro Commander	Each				R0.00
b	Lite Commander	Each				R0.00
c	Standard Commander	Each				R0.00
d	PLC Commander	Each				R0.00
e	Professional Commander	Each				R0.00
f	Expansion 10 x Digital Module	Each				R0.00
g	Expansion 8 x Analogue Module	Each				R0.00
h	Expansion 5 x Input & Output Combined Module	Each				R0.00
i	New 12V, 7Ah lead-acid battery	Each				R0.00
j	New 12V, 10Ah lead-acid battery	Each				R0.00
k	New 7A battery charger	Each				R0.00
l	New GSM line filter for EMC	Each				R0.00
5.2	**GSM Commander - Existing Sites**					
a	Micro Commander	Each				R0.00
b	Lite Commander	Each				R0.00
c	Standard Commander	Each				R0.00
d	PLC Commander	Each				R0.00
e	Professional Commander	Each				R0.00
f	Expansion 10 x Digital Module	Each				R0.00
g	Expansion 8 x Analogue Module	Each				R0.00
h	Expansion 5 x Input & Output Combined Module	Each				R0.00
i	New 12V, 7Ah lead-acid battery	Each				R0.00
j	New 12V, 10Ah lead-acid battery	Each				R0.00
k	New 7A battery charger	Each				R0.00
l	New GSM line filter for EMC	Each				R0.00
m	Re-programming of existing unit	Each				R0.00
n	Removal of existing, including delivery to Municipal stores against a signed delivery receipt	Each				R0.00

D4	**Part 4 - Transport: Local (any site within Hessequa - per km)**					
a	Light Delivery Vehicle	km				R0.00
b	1 ton 4x4 Light Delivery Vehicle	km				R0.00
c	10 ton Crane Truck	km				R0.00
					Total (VAT Excluded)	**R**
					15% VAT	**R**
					TOTAL (VAT INCLUDED)	**R**

Tenderers must price on the pricing schedule as indicated above.

NOTE: THE PRICES FOR YEAR ONE WILL REMAIN FIXED. FROM YEAR 2 ONWARDS, CPI PLUS 1% WILL APPLY.

Failure to adhere to the beforementioned may result in your tender being declared non-responsive.

DECLARATION

I, THE UNDERSIGNED (NAME) .....

CERTIFICATE THAT THE INFORMATION FURNISHED ABOVE IS CORRECT. I ACCEPT THAT THE MUNICIPALITY MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

AUTHORISED SIGNATURE: .....

NAME: .....

CAPACITY: .....

DATE: .....