public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

BILL OF QUANTITIES/SCOPE OF WORK: 12 MONTHS PLUMBING TERM CONTRACT FOR EMERGENCY AND URGENT SERVICES IN PRETORIA AREAS: CGO BUILDING - 7TH FLOOR MINISTRY OFFICES AND LABIA HOUSE 5TH FLOOR MINISTRY OFFICES

T10/22/05/24

ID 3200566

PRICING DATA
SCHEDULES OF QUANTITIES

Failure to price all items in all the Schedules could result in the tender not being considered

No.	Description	Units	Quantity	Rate	Total
1	**EXCAVATIONS** Excavate carefully in all materials for trenches to expose defective pies, select, backfill, compact and dispose of all surplus material on completion. Allow for workspace ,shoring and dewatering as required .Payment for excavations will be limited to the length of the defective pipe being replaced .Excavations will only be paid at one of the following rates ,depending on the category in which the depth falls.				
1.1	Over 0.1m and up to 1.0m deep	M3	01		
1.2	Over 1.0m and up to 1.5m deep	M3	01		
1.3	Over 1.5m and up to 2.0m deep	M3	01		
1.4	Over 2.0m and up to 3.0m	M3	01		
1.5	Deeper than 3.0m	M3	01		
2	**EXTRA OVER ITEM I (EXCAVATIONS)** **Hack up, remove and replace and or repair surfaces to match the existing on completion of repairs .Payments for this item will be limited to the actual quantity of material removed to the line and length of the excavations done including working space as described above .Payment will only be made at one of the following rates depending on the types of material and average thickness of material being replaced.**				
2.1	Over 0.1mm and up to 100mm thick concrete surfaces	M^2	01		
2.2	Over 100mm and up to 150mm thick concrete surfaces	M^2	01		
2.3.	Over 150mm and up to 300mm thick concrete surfaces	M^2	01		
2.4	Over 300mm thick concrete surfaces	M^2	01		
2.5	Over 0.1mm and up to 150mm thick re-enforced concrete surfaces	M^2	01		
2.6	Over 150mm and up to 300mm thick re-enforced concrete surfaces	M^2	01		
2.7	Over 300mm thick re-enforced concrete surfaces	M^2	01		
2.8	Grass sods	M^2	01		
2.9	Pre-cast concrete paving slabs (all sizes and thicknesses)	M^2	01		
2.10	Brick paving; (all type, size and thicknesses)	M^2	01		
2.11	Pre-cast concrete Municipal road kerbing and channelling (all type, sizes and thicknesses)	M	01		
2.12	Concrete upstand for fire hydrant	Each	01		
2.13	Plastered brick wall; Painted	M^2	01		

2.14	Plastered brick wall; Tiled	M^2	01		
2.15	Half brick wall to match the existing	M^2	01		
2.16	One brick wall to match the existing	M^2	01		
2.17	Over 0.1mm and up to 25mm thick bituminous surfaces incl. 150mm thick base course and prepared sub-base course	M^2	01		
2.18	Over 25mm and up to 32mm thick bituminous surfaces incl.150mm thick base course and prepared sub-base course	M^2	01		
2.19	Over 0.1mm and up to 150mm compacted gravel surface	M^2	01		
2.20	Over 0.1mm and up to 150mm thick compacted gravel surfaces	M^2	01		
3	**PIPEWORK** **Replace pipe work to match the existing inclusive of all couplings, adaptors, tees, bends, holder bats and concrete trust blocks where necessary** **NOTE: Fibre cement pipes are to be replaced to the full standard length of the one being replaced**				
3.1	15mm Diameter Polycop	Lm	01		
3.2	22mm Diameter Polycop	Lm	01		
3.3	28mm Diameter Polycop	Lm	01		
3.4	35mm Diameter Polycop	Lm	01		
3.5	42mm Diameter Polycop	Lm	01		
3.6	54mm Diameter Polycop	Lm	01		
3.7	15mm Diameter copper (Class 2)	Lm	01		
3.8	22mm Diameter copper (Class 2)	Lm	01		
3.9	28mm Diameter copper (Class 2)	Lm	01		
3.10	35mm Diameter copper (Class 2)	Lm	01		
3.11	42mm Diameter copper (Class 2)	Lm	01		
3.12	54mm Diameter copper (Class 2)	Lm	01		
3.13	76mm Diameter copper (Class 2)	Lm	01		
3.14	108mm Diameter copper (Class2)	Lm	01		
3.15	15mm Diameter copper Galvanised	Lm	01		
3.16	20mm Diameter Galvanised	Lm	01		
3.17	25mm Diameter Galvanised	Lm	01		
3.18	32mm Diameter Galvanised	Lm	01		
3.19	40mm Diameter Galvanised	Lm	01		
3.20	50mm Diameter Galvanised	Lm	01		
3.21	65mm Diameter Galvanised	Lm	01		
3.22	80mm Diameter Galvanised	Lm	01		
3.23	100mm Diameter Galvanised	Lm	01		
3.24	150mm Diameter Galvanised	Lm	01		
3.25	50mm Diameter Class 12 UPVC piping	No	01		
3.26	63mm Diameter Class 12 UPVC piping	No	01		
3.27	75mm Diameter Class 12 UPVC piping	No	01		

3.28	90mm Diameter Class 12 UPVC piping	No	01		
3.29	110mm Diameter Class 12 UPVC piping	No	01		
3.30	160mm Diameter Class 12 UPVC piping	No	01		
3.31	200mm Diameter Class 12 UPVC piping	No	01		
3.32	250mm Diameter Class 12 UPVC piping	No	01		
3.33	31mm Diameter Class 12 UPVC piping	No	01		
3.34	50mm Class D high pressure fibre cement piping	No	01		
3.35	75mm Class D high pressure fibre cement piping	No	01		
3.36	100mm Class D high pressure fibre cement piping	Lm	01		
3.37	150mm Class D high pressure fibre cement piping	Lm	01		
3.38	200mm Class D high pressure fibre cement piping	Lm	01		
3.39	250mm Class D high pressure fibre cement piping	Lm	01		
3.40	300mm Class D high pressure fibre cement piping	Lm	01		
3.41	40mm Diameter UPVC waste pipe	Lm	01		
3.42	40mm Diameter UPVC waste socket	Item			
3.43	50mm Diameter UPVC waste pipe	Lm	01		
3.44	50mm Diameter UPVC Bend waste Inspection eye	No	01		
3.45	110mm PVC underground pipe	Lm	01		
3.46	110mm PVC soil and vent pipe	Lm	01		
3.47	110mm PVC 87.5 Degree Pan collar plain bend	No	01		
3.48	110mm PVC Underground double socket	No	01		
3.49	110mm PVC soil & vent 95 degree double junction	No	01		
3.50	50mm PVC Branch tee 45 degree	No	01		
3.51	110 mm Junction 90 degree plain	No	01		
3.52	110mm PVC Underground Female adaptor	No	01		
3.53	PVC 2Way Vent pipe	No	01		
3.54	110mm PVC Underground Gully P trap	No	01		
3.55	110mm Diameter UPVC single socket	No	01		
3.56	150mm Diameter UPVC Sewer/ storm water line	Lm	01		
3.57	100mm Diameter vitrified sewer line	Lm	01		
3.58	200mm Concrete pipe for water / sewer / storm water	Lm	01		
3.59	250mm Concrete pipe water / sewer / storm water	Lm	01		
3.60	300m Concrete pipe water / sewer / storm water	Lm	01		
3.61	PVC Soil & Vent Inspection Pipe Pro-Flo Sabs 110Mm	No	01		

4	**DEFECTIVE / LEAKING COUPLINGS** **Replace defective couplings or fit new instant couplings to stop leaks to all types of pipe work as mentioned below**				
4.1	**15mm Diameter Polycop / Copper**				
4.1.1	Compression or capillary solder type fittings	No	01		
4.2	**22mm Diameter Polycop / Copper**				
4.2.1	Compression or capillary solder type fitting	No	01		
4.3	**28mm Diameter Polycop / Copper**				
4.3.1	Compression or capillary solder type fittings	No	01		
4.4	35mm Diameter Polycop / Copper	No	01		
4.4.1	Compression or capillary solder type fittings	No	01		
4.5	42mm Diameter Polycop / Copper	No	01		
4.5.1	Compression or capillary solder type fittings	No	01		
4.6	54mm Diameter Polycop / Copper	No	01		
4.6.1	Compression or capillary solder type fittings	No	01		
4.7	76mm Diameter copper	No	01		
4.7.1	Compression or capillary solder type fittings	No	01		
4.7.2	Cascade coupling	No	01		
4.7.3	Coupling	No	01		
4.8	**108mm Diameter copper**				
4.8.1	Compression or capillary solder type fittings	No	01		
4.8.2	Cascade coupling	No	01		
4.8.3	Coupling	No	01		
4.9	**Galvanised pipework**	No	01		
4.9.1	15mm Diameter Galvanized	No	01		
4.9.2	20mm Diameter Galvanized	No	01		
4.9.3	25mm Diameter Galvanized	No	01		
4.9.4	32mm Diameter Galvanized	No	01		
4.9.5	40mm Diameter Galvanized	No	01		
4.9.6	50mm Diameter Galvanized	No	01		
4.9.7	65mm Diameter Galvanized	No	01		
4.9.8	80mm Diameter Galvanized	No	01		
4.9.9	100mm Diameter Galvanized	No	01		
4.18	150mm Diameter Galvanized	No	01		

4.10	**50mm Diameter Class 12 HDPE piping**				
4.10.1	Cascade coupling	No	01		
4.10.2	Coupling- short collar	No	01		
4.11.3	Coupling – Long collar	No	01		
4.12	**75mm Diameter Class 12 HDPE**				
4.12.1	Cascade coupling	No	01		
4.12.2	Coupling-Short collar	No	01		
4.12.3	Coupling-Long collar	No	01		
4.13	**90mm Diameter Class 12HDPE piping**				
4.13.1	Cascade coupling	No	01		
4.13.2	Coupling-Short collar	No	01		
4.13.3	Coupling-Long collar	No	01		
4.14	**110mm Diameter Class 12HDPE piping**				
4.14.1	Cascade coupling	No	01		
4.14.2	Coupling -Short collar	No	01		
4.14.3	Coupling - Long collar	No	01		
4.15	**160 Diameter Class 12HDPE piping**				
4.15.1	Cascade coupling	No	01		
4.15.2	Coupling-Short collar	No	01		
4.15.3	Coupling-Long collar	No	01		
4.16	**200mm Diameter Class 12 HDPE piping**				
4.16.1	Cascade coupling	No	01		
4.16.2	Coupling-Short collar	No	01		
4.16.3	Coupling-Long collar	No	01		
4.17	**250 mm Diameter Class 12 HDPE**				
4.17.1	Cascade coupling	No	01		
4.17.2	Coupling-Short collar	No	01		
4.17.3	Coupling-Long collar	No	01		
4.18	**315mm Diameter Class 12 HDPE**				
4.18.1	Cascade coupling	No	01		
4.18.2	Coupling-Short collar	No	01		
4.18.3	Coupling- Long collar	No	01		
4.19.	**75mm Class D high pressure fibre cement piping**				
4.19.1	Cascade coupling	No	01		
4.19.2	Coupling-Short collar	No	01		
419. 3	Coupling–Long collar	No	01		

4.20	**100mm Class D high pressure fibre cement piping**				
4.20.1	Cascade coupling	No	01		
4.20.2	Coupling-Short collar	No	01		
4.20.3	Coupling-Long collar	No	01		
4.21.	**150mm Class D high pressure fibre cement piping**				
4.21.1	Cascade coupling	No	01		
4.21.2	Coupling-Short collar	No	01		
4.21.3	Coupling –Long collar	No	01		
4.22.	**200mm Class D high pressure fibre cement piping**				
4.22.1	Cascade coupling	No	01		
4.22.2	Coupling-Short collar	No	01		
4.22.3	Coupling –Long collar	No	01		
4.23.	**250mm Class D high pressure fibre cement piping**				
4.23.1	Cascade coupling	No	01		
4.23.2	Coupling-Short collar	No	01		
4.23.3	Coupling –Long collar	No	01		
4.24	**300mm Class D high pressure fibre cement piping**				
4.24.1	Cascade coupling	No	01		
4.24.2	Coupling-Short collar	No	01		
4.24.3	Coupling –Long collar	No	01		
5.	**HOT WATER CYLINDERS** Replace horizontal /vertical/multi pressure /combination electrical hot water cylinders, complete with necessary pressure reducing valves, vacuum breakers, relief valves, isolators Allowance must be made for all necessary pipe work to accommodate new hot water cylinders. The entire installation is to be done strictly in accordance with the Manufacturer's instructions All new installations are to bear the SANS mark				
i)	**Note:** Hot water cylinder manufacturer's guarantee /warranty including purchase date must be submitted with invoice				
ii)	Plumbers current year licence number				

	must be indicated on hot water cylinder as well as on guarantee/warranty				
iii)	The successful tender must make allowance when replacing a hot water to install an isolator in the run of the electrical supply in close proximity to the hot water cylinder in order to comply with the SANS code of practice.				
iv)	Supply and install copper bonding between hot and cold water pipes using 6mm brass-screws and washers from the copper strapping. Connect a 2.5 square meter earth wire to the earth wire to the earth strand of the hot water cylinder.				
v)	All electrical work must be executed by a qualified electrician and must be accompanied by a certificate of compliance				
5.1	100 litre 100kpa	No	01		
5.2	100 litre 200kpa	No	01		
5.3	100 litre 400kpa	No	01		
5.4	150 litre 100kpa	No	01		
5.5	150 litre 200kpa	No	01		
5.6	150 litre 400kpa	No	01		
5.7	150 litre 100kpa	No	01		
5.8	200 litre 100kpa	No	01		
5.9	200 litre 200kpa	No	01		
5.10	200 litre 400kpa	No	01		
5.11	150 litre Combination hot water cylinder	No	01		
6.	**Sundries for Hot water Installations**				
6.1	Replace 100kpa Pressure reducing valve	No	01		
6.2	Replace 150kpa Pressure reducing valve	No	01		
6.3	Replace 200kpa Pressure reducing valve.	No	01		
6.4	Replace 400kpa Pressure reducing valve	No	01		
6.5	Replace 600kpa Pressure reducing valve	No	01		
6.6	Provide new drip tray complete with complete with 40mm diameter outlet pipe taken to outside through eaves ,with support by three 75x 50mm SA pine bearers nailed securely to timbers. Cylinders to rest on three 38x	No	01		

	38 mm battens placed in tray. Allow for the disconnection and reconnection of water supply and draw off pipes				
6.7	Replace thermostat only, and adjust	No	01		
6.8	Replace 1 to 4kw " Kerold" or ceramic type element	No	01		
6.9	Replace plate with 1 to 4kw mega flow type cylinder element, thermostat and mode complete	No	01		
6.10	Replace 1 to 4kw element including thermostat	No	01		
7	**VALVES** **Replace valves and accessories to match existing**				
7.1	15mm Diameter brass stopcock	No	01		
7.2	22mm Diameter brass stopcock	No	01		
7.3	54mm Gate valves	No	01		
7.4	75mm Gate valves	No	01		
7.5	100mm Gate valves	No	01		
7.6	150mm Gate valves	No	01		
7.7	200mm Gate valves	No	01		
7.8	250mm Gate valves	No	01		
7.9	300mm Gate valves	No	01		
7.10	Servicing to all sizes of gate valves including the replacement of the defective parts	No	01		
7.10.1	Replace symphonic cistern valve with Cobra No.780-235 or other approved symphonic flushing valve unit with handle, cap and back nuts and flush pipe.	No	01		
8	**CLEAR BLOCKAGES**				
8.1	Inspect drainage & sewerage system using CCTV Inspection camera	Per Hour	01		
8.2	Clear blockage by means of high pressure water jet machine	Per Hour	01		
8.3	Clear blocked toilets , urinals ,sinks, and showers	Each	01		
8.4	Clear blocked grease trap and clean strainer by using caustic salt	No	01		
8.5	Clean blocked gulley	No	01		
8.6	Cleaned blocked waste pipes including traps	No	01		
8.7	Clear out entire blockage in sewer system including all sanitary fittings, gulley's and manholes up to a connecting point at the main sewer line	Per Hour	01		
8.8	Clear outside blockages/ apply drain cleaner or chemicals to outside	Litre	01		
8.9	Clear out entire main sewer line with		01		

	pipe size up to 300mm in diameter and up to 100metres in length	Per Hour			
8.10	Ditto, but more than 100 metres	Per Hour	01		
9	**INSPECTION CHAMBER SUNDRIES**				
9.1	Replace cast iron rodding eye cover	No	01		
9.2	Replace UPVC rodding eye cover	No	01		
9.3	Replace 450 x 600mm single seal frame	No	01		
9.4	Replace 450 x 600mm double seal frame	No	01		
9.5	Replace 450 x 600mm single seal cover	No	01		
9.6	Replace 450 x 600mm double seal cover	No	01		
9.7	Replace 450 x 600mm single seal cover and frame:25kg	No	01		
9.8	Replace 450 x 600mm double seal cover and frame:72kg	No	01		
9.9	Replace 600 x 600mm single seal cover	No	01		
9.10	Replace 600 x 600mm double seal cover	No	01		
9.11	Replace 600 x 600mm double seal cover and frame;124kg	No	01		
9.12	Replace 650mm diameter cover and frame;135kg	No	01		
9.13	Replace 650mm diameter cover and frame;204kg	No	01		
9.14	Allow for breaking through inspection chamber walls and concrete surrounds to gain access to valves or pipes and make good on completion	Item	01		
10	**BALL VALVES**				
10.1	Service 15mm ball valve	No	01		
10.2	Service 20mm ball valve	No	01		
10.3	Service 25mm ball valve	No	01		
10.4	Replace 15mm Ball valve	No	01		
10.5	Replace 20mm Ball valve	No	01		
10.6	Replace 20mm Ball valve	No	01		
11	**TAPS/MIXERS**				
11.1	Service and reseat 15mm tap	No	01		
11.2	Service and reseat 20mm tap	No	01		
11.3	Service and reseat 15mm Mixer	No	01		
11.4	Service and reseat 20mm mixer	No	01		
11.5	15mm bath, basin or sink tap	No	01		
11.6	20mm bath, basin or sink tap	No	01		
11.7	15 mm bath, basin or sink mixer	No	01		
11.8	20mm bath, basin or sink mixer	No	01		
11.9	15mm shower tap	No	01		
11.10	20mm shower tap	No	01		
11.12	15mm shower mixer	No	01		

11.13	20mm shower mixer	No	01		
11.14	Replace 15mm urinal bibcock	No	01		
11.15	Replace Toilet pan P/S trap	No	01		
11.16	Replace Toilet Cistern (Shires Lynx)	No	01		
11.17	Replace heavy duty double flap toilet seat	No	01		
11.18	Replace wash hand basin pedestal type including trap	No	01		
11.19	Replace Bath /basin/urinal p/s trap	No	01		
11.20	Replace urinal p/s trap	No	01		
11.21	Replace flush pipe connector	No	01		
11.22	Replace flush master	No	01		
11.23	Replace Beta valve to cistern	No	01		
11.24	Replace Beta valve washer to cistern	No	01		
11.25	Service flush master (full kit)	No	01		
11.26	Reseal pan outlet with silicone	No	01		
11.27	Replace white glazed wall tiles	M^2	01		
12	**FLEXI PIPES**				
12.1	Chrome plated pipe connector	No	01		
12.2	Stainless steel bath shower flexible hose connector	No	01		
12.3	Braided flexible pipes connector: Female	No	01		
12.4	Braided flexible pipes connector: Male	No	01		
12.5	Braided flexible pipes connector : Male & Female	No	01		
13	**SEPTIC TANKS**				
13.1	Cleaning of sludge and disposal using specialized dumping trucks	P/Litre	01		
13.2	Allow disinfecting of sewer septic tank with Waste chemical	P/Litre	01		
14	**HYDRO BOILERS**				
14.1	5 Litre	No	01		
14.2	7.5 Litre	No	01		
14.3	10 Litre	No	01		
14.4	15 Litre	No	01		
	SCHEDULE ONE (1) TOTAL CARRIED TO SUMMARY PAGE				

SIGNATURE : _____

DATE : _____

COMPANY STAMP

SCHEDULE TWO (2)
NON SCHEDULE MATERIAL AND LABOUR

No.	Description	Units	Quantity	Rate	Total
1	**MATERIAL** Mark –up on allowance for non-schedule material calculated as follows: R20 000.00 x %= R..... (R.....to entered in total column)	Rand		%m/up	
2	**LABOUR** The rates for labour will be deemed to include for all statutory minimum labour rates ,contribution to bonus, holiday ,pension, medical funds etc as well as for normal working hours, overtime, Sunday and holiday time must include transport and travelling costs ,but excluding VAT				
2.1	**LABOUR NORMAL WORKING HOURS**				
2.1.1	Skilled Artisan	P/hr	01		
2.1.2	General Assistant	P/hr	01		
2.2	**LABOUR :OVERTIME,SUNDAY AND PUBLIC HOLIDAYS**				
2.2.1	Skilled Artisan	P/hr	01		
2.2.2	General Assistant	P/hr	01		
	SCHEDULE TWO(2)TOTAL CARRIED TO SUMMARY PAGE				

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COMPANY STAMP

SCHEDULE THREE (3)

TRANSPORT INSIDE CORE AREAS AND GENERAL

No.	Description	Units	Quantity	Rate	Total
1	Transport for travelling inside core defined areas	Km	1		
	SCHEDULE THREE(3)TOTAL CARRIED TO SUMMARY PAGE				

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SUMMARY PAGE

NO.		Total
1.	TOTAL BROUGHT FORWARD FROM SCHEDULE ONE (1)	
2.	TOTAL BROUGHT FORWARD FROM SCHEDULE TWO (2)	
3.	TOTAL BROUGHT FORWARD FROM SCHEDULE THREE (3)	
	SUB TOTAL	
	VAT	
	GRAND TOTAL	

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DATE : _____

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