

SECTION 3:

EXTERNAL WORK

Item No		Quantity	Rate	Amount
	<u>SECTION NUMBER 3</u>			
	<u>BILL NUMBER 1</u>			
	<u>SITE WORKS AND PAVING (PROVISIONAL)</u>			
	<u>GENERAL EARTH WORKS (PROVISIONAL)</u>			
	JBCC Work Group No 104.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For Preambles see "PW371 - Specification of Materials and Methods to be used"			

	<u>SITE CLEARANCE, REMOVAL OF TREES, ETC.</u>			
	<u>Site Clearance :</u>			
1	Clear area of site of all rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200 mm girth, bush, etc., including reclearing of any subsequent vegetation growth during the contract period as considered necessary by the Representative and removing all material from site, As item 1 page 124	m2	2 135	
	<u>Taking out and removing, grubbing up roots and filling in holes</u>			
2	Indigenous tree exceeding 200mm and not exceeding 500mm girth	No	3	
3	Indigenous tree exceeding 500mm and not exceeding 1000mm girth	No	2	
4	Indigenous tree exceeding 1000mm and not exceeding 1500mm girth	No	3	
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ROADS, PAVINGS, ETC.,

EXCAVATION, FILLING, ETC

Excavation under paving not exceeding 300mm deep

5	Under floors	m3	1 344
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Earth filling supplied by the contractor compacted to 95% Mod AASHTO density

6	150mm layers of G5 Material and compacted to 95% Mod, The G5 should be the form of a sugar dolerite, decomposed granite or decomposed sandstone	m3	810
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7	150mm layers of G7 Material and compacted to 95% Mod, The G7 should be the form of a sugar dolerite, decomposed granite or decomposed sandstone	m3	771
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Base course constructed of filling supplied by the Contractor:

8	Stabilisation of sub-base or in-situ material with equal parts of Ordinary Portland Cement and road lime, evenly worked into filling material, including wetting and curing to the satisfaction of the Engineer.	m3	427
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Compaction of surfaces:

9	Compaction of ground surface under pavings, roads, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density and 100% Mod AASHTO for sand.	m2	2 135
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	<u>Coarse river sand filling supplied by the Contractor</u>		
10	Under paving	m3	362
	<u>WEED KILLER</u>		
	<u>Approved weed killer in strict accordance with manufacturers instructions</u>		
11	Under paving, etc	m2	2 548
	<u>PAVING</u>		
	Paving to be laid in accordance with SABS 1200 MJ, SABS 1058 and the Concrete Masonry Association's specifications		
	<u>Paving of 50 mm clay paving bricks of approved colour with butt joints on 20 mm thick river sand bed (elsewhere measured)</u>		
12	Paving in herringbone bond pattern to falls	m2	413
13	Extra over for straight edge blocks	m	351
	<u>Paving of 80 mm concrete paving bricks of approved colour with butt joints on 20 mm thick river sand bed (elsewhere measured)</u>		
14	Paving in stretcher bond to falls	m2	2 135
	<u>PRECAST KERBS</u>		
	<u>Precase concrete finished smooth on exposed surfaces including bedding, cutting and pointing:</u>		
15	Kerb (SABS927 fig 6) with 45 x 125mm unreinforced concrete footing, 250 x 250mm triangular concrete haunching at back of each joint and 300 x 150mm concrete infill in front with cement grouted joints, including excavation, backfilling, etc.	m	670
16	Ditto, Kerb (SABS 927 fig 6) but circular on plan not exceeding 4m radius formed with short lengths of straight kerb.	m	62

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RETRO-REFLECTIVE ROAD SIGNS, ETC.

Road signs and road markings shall conform to the requirements given in the South African Road Traffic Manual and relevant SABS specifications.

The rate tendered for road signs shall cover the cost of supplying and erecting the completed signboard supports, face, frame and fixing brackets and shall include the cost for providing retro-reflective backgrounds, symbols, characters, legends and borders of the type specified in the South African Road Traffic Manual. The tendered rate shall include for excavations, backfilling and concreting of sign supports.

17	900mm Diameter regulation "DISABLED PARKING SYMBOL" sign (R323) in accordance with S.A.B.S. standard fitted and fixed on creosoted pole, 2 700mm high bedded in 450 x 450 x 600mm deep concrete footing, included all necessary excavation, etc.	No	3
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STORMWATER CHANNELS

Stormwater channels, V drains

18	20 MPa Concrete open surface stormwater channel 1 000mm wide and 85mm thick with V-shape channel 1 000mm wide and 75mm deep extreme formed in same, finished smooth on exposed faces with angles slightly rounded, laid to falls in lengths not exceeding 2m, jointed in 3:1 cement mortar including excavations, necessary formwork including 150mm deep selected filling underneath and compacting to a density of 93% of the Mod. AASHTO Maximum density	m	278
19	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	333
20	Extra over 1 000mm wide channel for angles, intersections, ends, dressing into sides of catchpits, etc.	No	18
21	Triangular shaped stormwater channel outlet 1m wide at head, 1.5m wide at base and 1m long at sides formed of 85mm thick concrete V-shaped base including all excavations, formwork and six 150 x 150mm broken bricks or stones protruding 150mm high at base of the spill basin	No	3

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	<u>GULLIES</u>			
22	110 mm uPVC gully complete with and including 380 x 380 x 170mm precast concrete gully surround on 75mm Class C concrete base and fitted with 187mm diameter uPVC grating.	No	1	
	<u>INSPECTION CHAMBERS, MANHOLES, ETC.</u>			
	<u>Sumps, catchpits, inspection chambers, etc (gratings and covers elsewhere):</u>			
	<u>Gratings, covers, etc:</u>			
23	600 x 600 x 60kg Dished cast iron grating set in mortar	No	1	
	<u>The following in soakaways, french drains, etc:</u>			
24	Excavate not exceeding 2m deep.	m3	7	
25	Unreinforced concrete 15Mpa in base.	m3	3	
26	150mm Thick concrete block wall.	m2	4	
27	Selected rubble filling.	m3	3	
28	250 Micron plastic waterproof membrane laid over soakaway.	m2	10	
29	Risk of collapse to sides of soakaway excavations not exceeding 1,5m deep.	m2	12	
30	Extra over soakaway excavations for carting away surplus material from excavations to a dumping site to be located by the contractor.	m3	2	
31	Earthfilling obtained from excavations or stock piles on site compacted to 93% backfilled to soakways.	m3	2	
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CONCRETE APRONS

The following in aprons

32	Level and compact earth under apron slab.	m2	109
33	Unreinforced concrete (20MPa) in apron slab	m3	16
34	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	109
35	Wood float finish to top of concrete surface bed.	m2	109
36	Half rounded angle on edge of concrete aprons.	m	91
37	Rough formwork to edge of concrete not exceeding 300mm high.	m	182
38	10mm Expansion joints of 10mm Jointex filler board between vertical concrete surfaces not exceeding 300mm high.	m	9
39	Ditto, between vertical concrete surfaces and brickwork surfaces not exceeding 300mm high	m	91
40	Rake out softboard 25mm deep and seal expansion joints " Thioflex 600" polysulphide sealing compound including backing cord, bond breaker, primer, etc, in aprons.	m	100

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ALUMINIUM FLAGPOLE

The following in a 8.85m high Standard Government type Aluminium Flagpole as "Aluweld" or other approved and erected on 600 x 600 x 800mm deep Class C concrete base, incl excavations, carting away, etc.

41	8,85mm High flagpole comprising 130mm and 60mm outside diameter aluminium tubing tapered by way of an aluminium cone casting, welded and complete with spherical top cap, two pulleys, two cleats, two halyards (ropes), four flagrope clamps, swivel type base with four M20 x 550mm long anchorbolts for fixing flagpole baseplate including concrete base (Base size 1500 x 1500 x 550mm deep)	No	2	
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LANDSCAPING

Ground preparation

42	Cultivation and preparation of areas to be planted	m2	4 380	
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Topsoil, compost, lime and fertilizer

43	Topsoil supplied by the contractor in plant beds, grassed areas and holes for trees, shrubs, etc	m3	657	
44	"Kikuyu" sods approximately 80mm thick	m2	4 380	

SOFT LANDSCAPING

SOFT LANDSCAPING

45	Allow the PC amount of Two Hundred Thousand Rand (R 200 000.00) for Soft Landscaping complete	Item		200 000.00
46	Allow for profit and attendance	Item		

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<p><u>SECTION NUMBER 3</u></p> <p><u>BILL NUMBER 2</u></p> <p><u>WATER SUPPLY AND FIRE SERVICES (PROVISIONAL)</u></p> <p>JBCC Work Group No. 148</p> <p><u>WATER SUPPLIES</u></p> <p><u>Note:</u></p> <p>Rates for piping, etc., have to include all adaptors, flanges, etc.</p> <p><u>General</u></p> <p>Where ever possible, abridged descriptions have been used for those items in this Bill which appear under the main trade headings in previous/subsequent Bills. The full descriptions of these items in the Preambles, as referred to above, to the various trade bills are to, and do apply equally to this Section.</p> <p><u>Reference</u></p> <p>Special reference is made to SABS 1200 specifications for civil works.</p> <p>Special reference is made to Specifications and details of Department of Public Works Drainage Detail (December 1998).</p>			
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Protection of existing services

The contractor must make allowance against the relevant items for the following:

- (a) Necessary care to be taken when excavating near existing services in or across the path of excavations.
- (b) Protection and maintaining such service in operation by means of temporary support or shoring as necessary.
- (c) Delays and disruption of the progress of the work due to the existence of the service.
- (d) Repairs necessitated by damage caused by the Contractor.

SABS specifications references

Where reference is made to SABS 1200 specifications (all sections) it will be deemed to exclude clause 8 "Measurements and Payment".

Nature of ground

The tenderer must acquaint himself with the material to be excavated in and are requested to study the Geotechnical Survey Report attached to Part C4: Site Information of the procurement document

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or alternatively, from stock piles situated on the building site.

Prescribed tests

All prescribed tests are to be executed by an approved, accredited laboratory

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Concrete pipes

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

Polypropylene pipes

Polypropylene pipes 42 mm diameter and under shall be seamless copper coloured class 16 pipes jointed with brass compression fittings as designed for use with copper pipes as stated.

Pipes shall be firmly fixed to walls etc. with coloured nylon snap in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions.

All pipe diameters are to match sizes as utilised for copper pipes.

Polyethylene pipes

Polyethylene pipes 75 mm diameter and under up to 42 mm shall be seamless copper coloured class 16 Type IV HDPE pipes jointed with polymer compression fittings.

Pipes shall be firmly fixed to walls etc. with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions.

All pipe diameters are to match sizes as utilised for copper pipes.

C.O.D. Fibre Cement Pressure Pipes

Pipes shall be jointed with "Triplex" couplings. A lubricant (soft soap) is to be used in connecting the couplings to the pipe or fittings. The couplings are to be unsupported on the bedding when pipes are laid.

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uPVC pipes and fittings

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.

Soil, waste and vent pipes and fittings shall be solvent weld jointed.

Copper pipes

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In case of pipes with diameters not exceeding 60 mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In case of pipes with diameters exceeding 60 mm all sizes are given and no claim for extra bushes, reducers, etc., will be entertained.

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc. shall be finished smooth with plaster.

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor/Engineer thereof prior to backfilling.

"Soft rock" and "hard rock" shall be as defined in "Earthworks".

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Saddles

Saddles to be the Magnum uPVC type with stainless steel bolts and screw pieces complete with Talbot lockable clamp and compression external screw-thread adaptor.

uPVC pressure pipes and fittings

Pipes for water supply shall be of the class stated.

Pipes of 40 mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50 mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all outer fittings shall be cast iron, all with similar push-in type joints

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc. shall be finished smooth with plaster

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

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Laying, backfilling, bedding, etc. of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturer's instructions.

Where no manufacturer's instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 each of the following:

SABS 1200 L: Medium-pressure pipelines

LD: Sewers

LE: Stormwater drainage

Pipe trenches etc. shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200

DB: Earthworks (Pipe trenches)

Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1., 5.1 to 5.3 and 7 of SABS 1200

LB: Bedding (Pipes)

Unless otherwise described bedding of rigid pipes shall be class B bedding

Steel pipes, fittings and specials

Pipes of Nominal Bore up to 150 mm:

Substitute "screwed" in L3.4.2 with "flanged".

Pipes of Nominal Bore over 150 mm:

Add the following:

"All mild steel pipes must be manufactured from Grade B steel with minimum plate thickness of 6,0 mm except where specified otherwise."

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Corrosion protection

Cast Iron Pipes and Fittings:

Substitute L3.9.1 with the following:

"All internal surfaces shall be grit blasted to SA 2½ standard and then coated with Copon EP 2300 epoxy paint to a minimum thickness of 350 micron."

Joints, Bolts, Nuts and Washers:

Substitute L3.9.5 with the following:

"All joints, bolts, nuts and washers shall be cadmium-plated or stainless steel."

Rates

Rates for pipe items are to be all inclusive prices and rates (except where allowed for elsewhere) are for the completed work as described in the respective items and shall include all labour, pipes, **bedding and filling complete in layers not exceeding 300 mm (unless otherwise specified) and compacted** all sundry work, equipment cost, guards, lighting, profit and maintenance.

Under paved areas and buildings the sand bedding and filling must be stabilised with 4 % cement.

Rates for inspection chambers, etc., are to be all inclusive prices and rates (except where allowed for elsewhere) for the completed work as described in the respective items and shall include all labour, pipes, concrete-floors and slabs, brickwork, plastering, compacting, all sundry work, equipment cost, guards, lighting, profit and maintenance.

The Contractor is referred to Drawing no's 208640VSO/15 to 17 annexed to these Bill of Quantities.

Pipework, fittings, etc.

All underground steel pipes and fittings, after installation, shall be protected against corrosion according to PSL 1.2

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Maintenance period

The maintenance period for the following work shall be 12 calendar months.

**High density polyethylene class 16 piping
complying with SABS 533 Part III**

1	25 mm Pipes laid in and including trenches not exceeding 1000 mm deep	m	15
2	32 mm Pipes laid in and including trenches not exceeding 1000 mm deep	m	5
3	40 mm Pipes laid in and including trenches not exceeding 1000 mm deep	m	5
4	50 mm Pipes laid in and including trenches not exceeding 1000 mm deep	m	40
5	63 mm Pipes laid in and including trenches not exceeding 1000 mm deep	m	78

The following in HDPE compression (16 Bar) fittings

6	25 x 20 Reducer	No	6
7	25 x 90° Elbow	No	4
8	32 x 20 Reducer	No	3
9	32 x 90° Elbow	No	3
10	32 x 32 Equal Tee	No	1
11	40 x 90° Elbow	No	2
12	40 x 32 Reducer	No	1
13	40 x 22 Reducer	No	2
14	50 x 50 Euqual Tee	No	2
15	50 x 90° Elbow	No	6
16	50 x 32 Reducer	No	3

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17	63 x 63 Euqual Tee	No	8
18	63 x 90° Elbow	No	15
19	63 x 50 Reducer	No	1
<u>The following in valves, etc</u>			
20	32mm Stainless steel sluice/gate valve with teflon seat	No	1
21	35mm Isolating valve	No	2
22	35mm In-line strainer	No	1
23	35mm Non-return valve	No	1
24	35mm adjustable pressure reducing valve set to 4.0BAR	No	1
25	50mm Stainless steel sluice/gate valve with teflon seat	No	3
26	54mm Non-return valve	No	2
27	54mm In-line strainer	No	2
28	54mm Isolating valve	No	6
29	54mm adjustable pressure reducing valve set to 4.0BAR	No	1
30	63mm Isolating valve	No	5
<u>The following in Valve Chamber</u>			
31	Standard valve chamber size 337 x 337 x 390mm high comprising of Class 25/19 concrete footing and collar, with 200mm diameter Class B COD fibre cement pipe vertically into ground and covered with Besaans-du Plessis size 115mm diameter x 102 Type 7 stopcock box cast into concrete collar	No	5
<u>Sundries</u>			
32	Cut into existing HDPE pipe in ground and connect new 50mm HDPE water pipe	No	1.00

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BOREHOLE

Borehole

33	Allow the PC amount of Two Hundred and Sixty Thousand Rand (R 260 000.00) for Borehole complete	Item	260 000.00
34	Allow for profit and attendance	Item	

TESTING :

35	Allow for testing the whole of the water reticulation system and for any re-testing necessary after taking out and replacing any defective work to the satisfaction of the Representative.	Item	
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EMERGENCY WATER TANK

36	Galvanised steel tank (4x3x1 high module Panels) on 9m high galvanised steel stand (elsewhere measured) complete in accordance with CKS 114 including 100 mm diameter float valve series 7354 according to VOSA	Item	
37	Supply, deliver to site and erect 9 m high galvanised steel tank stand for the abovementioned tank, complete with side ladder, bearers, excavations, backfill, formwork all in strict accordance with the necessary safety acts, etc.	Item	
38	Galvanised steel tank (6x5x3 high module Panels) on ground level complete in accordance with CKS 114 including 100 mm diameter float valve series 7354 according to VOSA	Item	
39	Pretreatment Galvanised steel tank (4x4x4 high module Panels) on ground level complete in accordance with CKS 114 including 100 mm diameter float valve series 7354 according to VOSA	Item	

REINFORCED CONCRETE

40	Concrete base and stub columns for water tank	m3	19
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REINFORCEMENT (Provisional)

Mild steel reinforcement

41	8mm Diameter bars	t	0.23	
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High tensile steel reinforcement

42	12mm Ditto	t	0.91	
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43	16mm Ditto	t	1.14	
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WATER SUPPLIES TO IRRIGATION SYSTEM

44	Provide an amount of R100 000.00 (One Hundred Thousand Rand) for Irrigation system with JoJo tanks Pump etc		Item	100 000.00
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45	Profit and attendance on above-mentioned item		Item	
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	<u>BILL NUMBER 3</u>			
	<u>SOIL DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or other approved may be used with prior approval from the architect			
	JBCC Work Group No. 146			
	<u>EXISTING MANHOLE</u>			
1	Break into existing manhole, build in pipe as necessary, bench out in connection to the existing soil drainage system with and including all excavations, material and labour to the approval of the Representative.	No	1.00	
	<u>REPAIR OF SEWER INFRASTRUCTURE</u>			
	<u>Sewer pipe repairs, all pipe and fittings to be checked with Engineer before installing</u>			
	<u>Free Flow uPVC drain pipes including bedding, backfilling and compacting of pipe trenches</u>			
2	110mm Pipe and excavations not exceeding 1m deep	m	97	
3	110mm Pipe and excavations exceeding 1m and not exceeding 2m deep	m	34	
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Extra over Free Flow uPVC pipe for fittings

4	110mm Bend	No	12
5	110mm Access bend	No	23
6	110mm Access junction	No	7
7	110mm Rodding eye	No	11
8	110mm Gulley P-trap	No	5

Sundries

9	15MPa/19mm Mass concrete encasing around 110mm horizontal drain pipe including all necessary formwork	m	12
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Work to existing

10	Excavate in earth not exceeding 2m deep for and remove existing 110mm diameter drain pipe and fittings including backfilling, compaction, etc	m	131
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Sundries

11	Extra over excavations to trenches, holes, etc., for excavations in soft rock	m3	4
12	Ditto, but hard rock.	m3	4
13	Imported sand in bedding and surround to pipework well compacted in layers, including any additional excavation, risk of collapse, etc	m3	25
14	Keeping excavations free of water		Item

Precast concrete circular manholes

15	Standard precast manhole, not exceeding 750 mm deep internally complete with precast concrete rings, cover slab, double seal cast iron manhole cover and frame (SABS 558 Type 2A heavy duty in roads and Type 8A medium duty elsewhere), unreinforced concrete footing and benching in bottom, dished down to channels and finished smooth with plaster.	No	1
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16	Standard precast manhole, 1 050 mm internal diameter exceeding 750 mm and not exceeding 1 000 mm deep internally complete with precast concrete rings, cover slab, double seal cast iron manhole cover and frame (SABS 558 Type 2A heavy duty in roads and Type 8A medium duty elsewhere), unreinforced concrete footing and benching in bottom, dished down to channels and finished smooth with plaster.	No	1		
17	Standard precast manhole, 1 050 mm internal diameter exceeding 1000 mm and not exceeding 1 250 mm deep internally complete with precast concrete rings, cover slab, double seal cast iron manhole cover and frame (SABS 558 Type 2A heavy duty in roads and Type 8A medium duty elsewhere), unreinforced concrete footing and benching in bottom, dished down to channels and finished smooth with plaster.	No	2		
	<u>TESTING :</u>				
18	Allow for testing the whole of the soil drainage system and for any re-testing necessary after taking out and replacing any defective work to the satisfaction of the Representative.		Item		
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 Bill No. 3
 Soil Drainage (Provisional)
**RUBIQUANT
 QUANTITY SURVEYORS**

Item No		Quantity	Rate	Amount
	<u>SECTION NUMBER 3</u>			
	<u>BILL NUMBER 4</u>			
	<u>FENCING AND GATES (PROVISIONAL)</u>			
	Fencing prices are to include for site clearance and grading to even lines 1 m each side of fence line unless otherwise described, all necessary excavations in earth, risk of collapse and disposal of surplus excavated material			
	<u>DEMOLITIONS</u>			
	-WORK GROUP 102-			
	<u>Removal of existing fence</u>			
1	Take down and remove existing wire mesh fencing 2 400mm high including 300 mm flat wrapped, with post as indicated by the engineer	m	525	
2	Take down and remove existing steel palisade fencing 2 100mm high including posts as indicated by the engineer	m	125	
	<u>SITE CLEARANCE</u>			
	-WORK GROUP 104-			
3	Allow for digging up and removal of all grass, shrubs, rubbish and vegetable soil for a width of 500mm on either side of new fence line including forming 50mm high free space between underside of fence and ground surface by reducing or making up levels as required	m	525	
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METALWORK

-WORK GROUP 136-

SECURITY FENCING

Powder coated steel security fencing as per COCHRANE PRODUCTS 358 HIGH SECURITY FENCING MESH. All details and specifications to be verified with manufacturer

"ClearVu" or other approved

4	2900mm high "Cochrane ClearVu" fence with spikes on top or similar approved, complete with bases excavations etc. according to manufacturers detail, see details at the back of the bills of quantities	m	430		
5	2100mm high "Cochrane ClearVu" fence with spikes on top or similar approved, complete with bases excavations etc. according to manufacturers detail, see details at the back of the bills of quantities	m	95		
6	3500 x 2900mm High "Cochrane ClearVu" or similar approved Double gate complete as per details at the back of Bill of Quantities.	No	1		
7	4500 x 2100mm High "Cochrane ClearVu" or similar approved Double gate complete as per details at the back of Bill of Quantities.	No	1		
8	4500 x 2900mm High "Cochrane ClearVu" or similar approved sliding gate complete on and including gate rail, stoped end, guide rollers and gate motor.	No	1		
9	5500 x 2900mm High "Cochrane ClearVu" or similar approved sliding gate complete on and including gate rail, stoped end, guide rollers and gate motor.	No	1		

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Section No. 3
Bill No. 4
Fencing, etc (Provisional)

**RUBIQUANT
QUANTITY SURVEYORS**

Section No. 3

Bill No. 4

Fencing, etc (Provisional)

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Bill No. 4
Fencing, etc (Provisional)
**RUBIQUANT
QUANTITY SURVEYORS**

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SECTION SUMMARY - External Works (Provisional)

**Bill
No**

- 1 Site works and Paving (Provisional)
- 2 Water supplies (Provisional)
- 3 Soil Drainage (Provisional)
- 4 Fencing, etc (Provisional)

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**RUBIQUANT
QUANTITY SURVEYORS**

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SECTION 4:

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Item No	Quantity	Rate	Amount
<u>SECTION NO 4</u>			
<u>BILL NUMBER 1</u>			
<u>EMPLOYMENT AND TRAINING OF LABOUR ON EPWP-NYS INFRASTRUCTURE PROJECTS</u>			
<u>PREAMBLES</u>			
Tenders are advised to study Additional Specification SL: Employment and Training of Labour on the Expanded Public Works Programme (EPWP) Infrastructure Projects: National Youth Service, as bound elsewhere in the Bills of Quantities, and then price this Bill accordingly			
<u>TRAINING OF YOUTH WORKERS</u>			
Target : 20 Youth Workers			
<u>Skills development, Life Skills and Technical training:</u>			
1		Orientation and Life skills development traing for youth workers for an average of 10 days per youth worker (ref. SL 11.01.01)	150 000.00
	Item		
2		Technical skills training for youth workers for an average of 45 days per youth worker (ref. SL 11.01.01)	400 000.00
	Item		
3		Add profit on above if required	
	Item		
4		Allow for attendance on the above, if any	
	Item		
5		Penalty due to not meeting the target as in SL 11.01.02 (R 2'000.00 per Youth Worker)	
<u>Travelling and Accommodation during off-site Training</u>			
<u>Orientation ,Life skills training for 10 days each(SL)</u>			
6		Traveling (based on R30 per day return trip/trainer)	10 000.00
	Item		
7		Accomodation (based on 10 days per week and R150p/n)	25 000.00
	Item		
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**BERGVILLE MAGISTRATE OFFICE
REPAIR AND RENOVATIONS**

8	Add profit and attendance on above if required		Item		
	<u>Skill development and technical training (ref.SL)</u>				
9	Traveling (based on R30 per day return trip/trainer)		Item		10 000.00
10	Accommodation (based on 5 nights per week and R150/N)		Item		30 000.00
11	Add profit and attendance on above if required		Item		
	<u>ALTERNATIVE WORKERS FOR THE PERIOD OF OFF-SITE TRAINING</u>				
12	Skills development and technical training for youth workers for a period of 45 days per youth worker(ref: SL11.03.01)	W/D	1 935		
	<u>Employment of youth workers</u>				
13	Employment of youth workers				
	<u>NOTE:</u> The unit of measurement shall be the number of youth workers at the labour rate of R1100 per month as the agreed by MINMEC multiplied by the period employment in months and the rate tendered shall include full compensation for all costs associated with the employment of youth workers and for complying with the conditions of contract. The cost for training shall be excluded from this item. This item is based on 6 months appointment for youth workers				
			Item		112 200.00
14	Add profit on above if required		Item		
15	Allow for attendance on the above, if any		Item		
	<u>Provision of EPWP designed overalls to youth workers</u>				
16	Supply 2x EPWP branded overalls, 1 x EPWP branded hard hat and 1 x pair safety boots to youth workers		Item		30 600.00
17	Add profit on above if required		Item		
18	Allow for attendance on the above, if any		Item		
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Provision of Small Tools for youth workers

19	Supply of small tools to youth workers. Specification to be supplied by the EPWP-NYS Service Provider for the respective trades. These tools will become the property of the youth workers after the completion of the programme (Ref SL 11.06.01)	Item	13 600.00
20	Add profit on above if required	Item	
21	Allow for attendance on the above, if any	Item	

Appointment of Youth team Leader

22	Appointment of youth team leader for the duration of the contract (ref:SL 11.07.01)	Item	54 000.00
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Liaison with Service provider

23	Liaison with service provider (ref SL 10.08)	Hrs	100
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CLO Allowance

24	Provide a budgetary allowance of Five Hundred Thousand Rand (R 500'000.00) for CLO complete	Item	500 000.00
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Section No. 4

Bill No. 1

Employment and Training of Labour

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Bill No. 1

Employment and Training of Labour

**RUBIQUANT
QUANTITY SURVEYORS**

FINAL SUMMARY

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	Part B : Electrical Installation	Item	
	Part C : Mechanical Installation	Item	
	<u>SUBTOTAL</u>		R
	ADD:		
	VALUE ADDED TAX		R
	TOTAL		R
	RUBIQUANT QUANTITY SURVEYORS		