**PROJECT NO:**

**NOVEMBER 2024**

**SESFONTEIN SEWAGE RISING MAIN AND OXIDATION PONDS**

ingplan
CONSULTING ENGINEERS

# BILL OF QUANTITIES

**PROJECT: SESFONTEIN RISING MAIN AND OXIDATION PONDS**

**SCHEDULE OF QUANTITIES: SECTION 1 - PRELIMINARY AND GENERAL**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **1** | SABS 1200 A | **GENERAL** | | | | |
| **1.1** | | **Scheduled fixed-charge and value-related items:** | | | | |
| 1.1.1 | PSA 8.3.1 | .01 Fixed preliminary and general charges | Sum | 1 | | |
| 1.1.2 | PSA 8.3.2 | .02 Value-related preliminary and general charges | Sum | 1 | | |
| 1.1.3 | 8.3.2.1,PS 6.3 & PS12 | .03 Supply and erect one nameboard complete and remove on completion | No | 1 | | |
| 1.1.4 | 8.2.2.2 | .04 Facilities for the Contractor | Sum | 1 | | |
| 1.1.5 | 8.3.3 | .05 Other fixed-charge obligations | Sum | 1 | | |
| 1.1.6 | 8.3.4 | .06 Removal of Site Establishment | Sum | 1 | | |
| **1.2** | | **Scheduled time-related items:** | | | | |
| 1.2.1 | PSA 8.4.1 | .01 Time-related preliminary and general charges | Sum | 1 | | |
| **1.3** | PSA 8.6 | **Prime Cost Sums:** | | | | |
| 1.3.1 | | .01 Additional laboratory tests required by the Engineer | PC Sum | 1 | 25 000 | 25 000.00 |
| 1.3.2 | | .02 Charge required by Contractor on subitem 110.03.01 above | % | | | |
| 1.3.3 | PS7.9 | .03 Survey and Landsurveyor as requested by the Engineer | PC Sum | 1 | 50 000 | 50 000.00 |
| 1.3.4 | | .04 Charge required by Contractor on subitem 110.03.03 above | % | | | |
| **1.4** | 8.8.2 & PSDB 8.3.7 | **Accommodation of traffic:** In accordance with the requirements of SADC Road Traffic Signs Manuals Part 1 to 4, the rate will include for the design, implimentation and mantenace during construction by the Contractor. | PC Sum | 1 | 40 000.00 | 40 000.00 |
| **1.5** | PSA 8.8.4 | **Location and protection of existing services:** | | | | |
| 1.5.1 | PSA 8.8.4.1 | 0.01 Provision of detecting devices fro | | | | |
| | | a) Water and sewer pipes | Sum | 1 | | |
| | | b) Electrical and other cables | Sum | 1 | | |
| 1.5.2 | PSA 8.8.4.2 | 0.02 Hand excavation necessary for locating and exposing existing services in all materials: | | | | |
| | | a) In roadways | m³ | 50 | | |
| | | b) In all other areas | m³ | 50 | | |
| 1.5.3 | PSA 8.8.4.2 & PS 7.12 | 0.03 Expose, protect and mainteain opperational | | | | |
| | | a) existing water/sewer pipes of various diametes, incl. sewer manholes | m | 602 | | |
| | | b) existing cables (telephone, power, and fibre) | m | 602 | | |
| **1.6** | | **Allowance for Occupational Health and Safety requirements** | PC Sum | 1 | 25 000.00 | 25 000.00 |
| **1.7** | PS 7.9 | **Allow for protection of Benchmarks and all erf pegs during construction** | Sum | 1 | | |
| | | | | **Total Section 1200A Carried to Summary** | | |

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**SCHEDULE OF QUANTITIES: SECTION 2 - SITE CLEARANCE**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **2** | SABS 1200C | **SITE PREPERATION** | | | | |
| **2.1** | 8.2.3 & PSC | **Clear and grub to prepare site (Oxidation Ponds):** | | | | |
| 2.1.1 | | .01 Remove topsoil to nominal depth of 100 mm, stockpile and maintain (if applicable) | m² | 22 500 | | |
| **2.2** | 8.2.3 & PSC | **Clear and grub to prepare site (Construction access Road Reserve area):** | | | | |
| 2.2.1 | | .01 Prepare and strip road reserve / removal, haulage, and spreading of topsoil or organic-rich material to depth of 100mm and maintain (if applicable) | m² | 3 600 | | |
| **2.3** | | **Fencing** | | | | |
| 2.3.1 | | a) Fencing as per detail drawing | m | 672 | | |
| 2.3.2 | | b) Access gate - as per drawing with lock and chain | No | 1 | | |
| | | | | | **Total Section 1200C Carried to Summary** | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 3 - EARTHWORKS (SMALL WORKS)**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **3** | SABS 1200 DA | **EARTHWORKS (SMALL WORKS)** | | | | |
| | | **OXIDATION PONDS LINER INSTALLATION** | | | | |
| 3.1 | 8.3.1 & PSD | 0.1 Excavate in all materials and use for backfill or dispose of | | | | |
| 3.1.1 | | b) Excavate for liner anchoring trench | m³ | 220 | | |
| 3.2 | 8.3.4 | 0.2 Import G7 material from commercial sources and compact to 95% MOD AASHTO for anchoring trench | m³ | 220 | | |
| 3.3 | | 0.3 Selected Fine Material for sand layer below HDPE liner not to exceed 3.0mm in particle size and compacted to 100-102 MOD AASHTO | m³ | 1200 | | |
| 3.4 | | 0.4 Compunded 1.5mm thick High Density Polyethylene (Vitaline or Similar Approved Product) welded together on site using a continous extrusion fusion welding system. | | | | |
| 3.4.1 | | a) 1.5mm HDPE Liner as per specification on drawing including installation and wastage | m² | 12000 | | |
| 3.4.2 | | b) Extrusion welding of line system as per drawings and specialist | m | 1850 | | |
| | | | | **Total Section 1200DA Carried to Summary** | | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 4 - EARTHWORKS (PIPE TRENCHES)**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **4** | SABS | **EARTHWORKS (PIPE TRENCHES)** | | | | |
| | | **RISING MAIN** | | | | |
| | 1200 DB | **TRENCHES FOR WATER PIPES** | | | | |
| **4.1** | 8.3.2 & PSDB | **Excavate in all materials for trenches, 800 mm wide, backfill, compact and dispose of surplus material:** | | | | |
| 4.1.1 | | .01 Pipes up to Ø 150-200mm for depths: | | | | |
| 4.1.1.1 | | .01 0.8-1.1m deep | m | 1200 | | |
| **4.1.2** | 8.2.2 & PSDB | **Extra over item 4.1.1.1 above for:** | | | | |
| 4.1.2.1 | | .01 Hard rock excavation | m³ | 60 | | |
| 4.1.2.2 | | .02 Soilcrete backfill where directed by the Engineer (5% cement per volume) (prov) | m³ | 30 | | |
| **4.3** | 8.3.2 & PSDB | **Excavate and dispose of unsuitable material from trench bottom (prov) to approve dump site -- all free haul** | m³ | 120 | | |
| **4.4** | 8.3.3 & PSDB | **Excavation ancillaries:** | | | | |
| 4.4.1 | 8.3.3.1 | .01 Make up deficiency in backfill material: | | | | |
| 4.4.1.1 | | .01 From other necessary excavations on site (prov) | m³ | 350 | | |
| 4.4.1.2 | | .02 By importation from designated borrow pits (prov) | m³ | 350 | | |
| 4.4.2 | 8.3.3.3 | .02 Compaction in road reserves (new water pipes) | m³ | 138 | | |
| 4.4.3 | | .03 Other reserves - within plots | m³ | 138 | | |
| | | **OXIDATION PONDS** | | | | |
| **4.5** | 8.3.2 & PSDB | **Excavate in all materials for trenches, 800 mm wide, backfill, compact and dispose of surplus material:** | | | | |
| 4.5.1 | | .01 Pipes up to Ø 200mm for depths: | | | | |
| 4.5.1.1 | | .01 0.3-1.2 m deep | m | 32 | | |
| **4.5.2** | 8.3.2 & PSDB | **Extra over item 4.5.1.1 above for:** | | | | |
| 4.5.2.1 | | .01 Hard rock excavation | m³ | Rate Only | | |
| 4.5.2.2 | | .02 Soilcrete backfill where directed by the Engineer (5% cement per volume) (prov) | m³ | 10.00 | | |
| **4.5.3** | 8.3.2 & PSDB | **Excavate and dispose of unsuitable material from trench bottom (prov) to approve dump site - all free haul** | m³ | 120 | | |
| **4.5.4** | 8.3.3 & PSDB | **Excavation ancillaries:** | | | | |
| 4.5.4.1 | 8.3.3.1 | .01 Make up deficiency in backfill material: | | | | |
| | | .01 From other necessary excavations on site (prov) | m³ | 12 | | |
| | | .02 By importation from designated borrow pits (prov) | m³ | 8 | | |
| | | | | **Total Section 1200DB Carried to Summary** | | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 5 - EARTHWORKS (SMALL EARTH DAMS)**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **5** | SABS | **EARTHWORKS (SMALL EARTH DAMS)** | | | | |
| | 1200 DE | **OXIDATION PONDS** | | | | |
| 5.1 | 8.3.3 | 01 Excavations for ponds | | | | |
| 5.1.1 | | a) Materails unsuitable for embankment | $m^3$ | 4900 | | |
| 5.1.2 | | b) Material suitable for embankment and pond construction | | | | |
| 5.1.2.1 | | i) Spillways | $m^3$ | 20 | | |
| **5.1.3** | | c) Cut to Fill to create ponds as per design levels | $m^3$ | 5000 | | |
| 5.1.4 | | d) Extra-over fro itmes a-c above | | | | |
| 5.1.4.1 | | i) Hard Rock | $m^3$ | 1820 | | |
| 5.2 | 8.3.4 | 02 Preparation of Exposed Surfaces | | | | |
| 5.2.1 | | a) bottom layer of ponds rip and re-compact to 98% Mod ASSHTO for sand | $m^2$ | 12500 | | |
| 5.3 | 8.3.5 | 03 Forming of Embankments | | | | |
| 5.3.1 | | a) Selected impervious material compacted to 95% MOD AASHTO | $m^3$ | 9500 | | |
| | | | | **Total Section 1200DE Carried to Summary** | | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 6 - CONCRETE (SMALL WORKS)**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **6** | | **CONCRETE (SMALL WORKS)** | | | | |
| | 1200 GA | **CONCRETE (VARIOUS STRENGTHS AND LOCATIONS** | | | | |
| 6.1 | 8.4.3 PSGA & PSG | 0.1 Strength Concrete, with 40% Flyash per volume | | | | |
| 6.1.1 | | a) Class 25/19 - for inlet flume floor | m³ | 2 | | |
| 6.1.2 | | b) Class 25/19 - for inlet flume walls | m³ | 3 | | |
| 6.1.3 | | c) Class 25/19 - for overflow channel floor | m³ | 10 | | |
| 6.1.4 | | d) Class 25/19 - for overflow channel walls | m³ | 20 | | |
| 6.2 | 8.4.2 PSGA & PSG | 0.2 Mortar Benching as per flume detail minimum 25mm thick | m² | 12 | | |
| **6.3** | | 0.3 **Formwork** | | | | |
| 6.3.1 | 8.2.2 PSGA & PSG | 0.1 Smooth vertical, off shutter, degree of accuracy ii. | | | | |
| 6.3.1.1 | | a) Flume walls | m² | 36 | | |
| **6.3.1.2** | | b) Overflow channel walls | m² | 242 | | |
| 6.3.2 | | 0.2 Chamfers to all exposed corners | m | 200 | | |
| 6.3.3 | 8.2.4 PSGA & PSG | 0.3 Box out holes / form voids - different sizes | | | | |
| 6.3.3.1 | | a) small circulars in walls up to Ø 355mm | No | 5 | | |
| **6.4** | | 0.4 **Reinforcemnet** | | | | |
| 6.4.1 | 8.3.2 PSGA & PSG | 0.1 Ref #319 | | | | |
| 6.4.1.1 | | a) for inlet flume | m² | 25 | | |
| 6.4.1.2 | | b) for overflow channels | m² | 180 | | |
| **6.5** | | 0.5 **Unformed Surface Finish** | | | | |
| 6.5.1 | 8.4.4 PSGA & PSG | 0.1 Steel-Floated Fisnish | | | | |
| 6.5.1.1 | | a) Inlet flume floor | m² | 7 | | |
| 6.5.1.2 | | b) Overflow channel floor | m² | 55 | | |
| 6.6 | 8.5 PSGA & PSG | 0.6 Joints - allow for all work and material required all as per | | | | |
| 6.6.1 | | a) Floor to wall joints with penebar 55 swellable | m | 100 | | |
| | | | | **Total Section 1200GA Carried to Summary** | | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 7 - STRUCTURAL STEELWORK**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **7** | SABS 1200 HA | **STRUCTURAL STEELWORK (SUNDRY ITEMS)** | | | | |
| 7.1 | | 0.1 50 x 3mm Galvanized square tube bracket to mount ultrasonic sensor as per specialist requirement, (all inclusive) | P. Sum | 1 | 5 000.00 | 5 000.00 |
| 7.2 | | 0.2 Baffel plate according to detials on drawings | P. Sum | 1 | 15 000.00 | 15 000.00 |
| 7.3 | | 0.3 Conncetion detail for baffel plate complete as per drawing (all inclusive) | P. Sum | 1 | 15 000.00 | 15 000.00 |
| | | | | | **Total Section 1200HA Carried to Summary** | **NAD 35 000.00** |

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**SCHEDULE OF QUANTITIES: SECTION 8 - BEDDING (PIPES)**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **8** | SABS | **BEDDING (PIPES)** | | | | |
| | 1200 LB | **RISING MAIN** | | | | |
| **8.1** | 8.2.1 & PSLB | **Provision of bedding from trench excavations:** | | | | |
| 8.1.1 | | .01 Selected granular material | m³ | RATE ONLY | | |
| 8.1.2 | | .02 Selected granular material | m³ | RATE ONLY | | |
| **8.2** | 8.2.2 & PSLB | **Supply only of bedding and blanket layers by importation:** | | | | |
| 8.2.1 | 8.2.2.3 & PSLB | .01 From commercial sources: | | | | |
| 8.2.1.1 | | .01 Selected granular material | m³ | 312 | | |
| 8.2.1.2 | | .02 Selected granular material - Blanket | m³ | 360 | | |
| **8.3** | | **Extra over items 8.1 and 8.2 for bedding stabilized with 5% cement per volume** | m³ | 20 | | |
| | | | | | **Total Section 1200LB Carried to Summary** | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 9 - MEDIUM PRESSURE PIPELINE**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **9** | SABS 1200 L | **MEDIUM PRESSURE PIPELINE** | | | | |
| | | **RISING MAIN** | | | | |
| **9.1** | 8.2.1 | **Supply, lay and bed (Class B) on bedding for flexible pipes, complete with couplings, endcap all bend for:** | | | | |
| **9.1.1** | | .01 uPVC class 16 pipes: | | | | |
| **9.1.1.1** | | a) Ø 160 mm -from pump station to oxidation ponds | m | 1 540 | | |
| **9.2** | 8.2.2 | **Extra over items 8.2.1 for the suppliying, laying and bedding of uPVC specials complete with couplings:** | | | | |
| **9.2.1** | | .01 90 degree bends | | | | |
| **9.2.1.1** | | a) 160mm dia | No | 3 | | |
| **9.2.2** | | 0 45 degree bends | | | | |
| **9.2.2.1** | | a) 160mm dia | No | 4 | | |
| **9.2.3** | | 0 22.5 degree bends | | | | |
| **9.2.3.1** | | a) 160mm dia | No | 1 | | |
| **9.2.4** | | 0 11.25 degree bends | | | | |
| **9.2.4.1** | | a) 160mm dia | No | 2 | | |
| **9.3** | 8.2.1 | **Anchor/Thrust Blocks and pedestals:** | | | | |
| **9.3.1** | | .01 Concrete | | | | |
| **9.3.1.1** | | a) Bends | No | 10 | | |
| **9.3.1.2** | | b) Tees | No | 1 | | |
| **9.3.1.3** | | c) Valves | No | 2 | | |
| **9.4** | 8.2.13 | Valve Chambers | | | | |
| **9.4.1** | | 0 Air Valve Chamber, Rising main pump line, supplie and install all items complete | | | | |
| **9.4.1.1** | | a) 50mm dia. Air Valve with double orifice and anti surge mechanisim, to include all fittings needed to fit. | No | 2 | | |
| **9.4.1.2** | | b) 50mm dia Flanged gate valve Face/Face | No | 2 | | |
| **9.4.1.3** | | c) Flanged reducer Face/Face 110mm to 50mm | No | 2 | | |
| **9.4.1.4** | | d) Flanged Reducting T-Piece from 160mm to 110mm | No | 2 | | |
| **9.4.1.5** | | e) Flanged addaptors fro uPVC piping 160mm | No | 4 | | |
| **9.4.1.6** | | f) 1000mm Circular pre-cast concrete chamber, complete with cover slab manhole cover frame and GRP Lockable manhole cover. All calcarmite 4Ever sterp iron to be GRP and included. Depth to be verfied on site min 1250mm | No | 2 | | |
| **9.4.1.7** | | g) 1250mm Diameter X 100mm thick 25 Mpa/19 concrete floor slab having 400mm diamter hole in centre for pipe to pass through and reinforced with Ref # 617 mesh | No | 2 | | |
| | | | | | **Carried Forward** | **NAD -** |

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| | | | | | Brought forward | NAD - |
| 9.4.2 | 8.2.13 | 0 Scour Valcve Chamber, complete | | | | |
| 9.4.2.1 | | a) Flanged reducing T-Piec from 160mm to 110mm | No | 1 | | |
| 9.4.2.2 | | b) 110mm dia Flanged Gate Valve | No | 1 | | |
| 9.4.2.3 | | c) 160mm dia Klamflex 3 - dismantling joint PN16 between 165mm and 205mm in legth including all sundreies for installation | No | 1 | | |
| 9.4.2.4 | | d) 100mm dia. Klamflex 3 - dismantling joint PN16, between 165mm and 205mm in length including all sundries for installation | No | 1 | | |
| 9.4.2.5 | | e) 100mm dia. flanged 90 degree short radius steel bend to suit dimensions of chamber, to be confirmed on site. | No | 1 | | |
| 9.4.2.6 | | f) 100mm dia flanged steel spool pipe with cast in puddle piece, length to be determined on site, max 1000mm | No | 1 | | |
| 9.4.2.7 | | g) 160mm dia flanged steel puddle pipe to be casted into chamber wall, length to be determined on site - max 1000mm | No | 1 | | |
| 9.4.2.8 | 8.2.2 PSGA & PSG | h) Smooth Scheduled Formwork degree of accuracy II with Class F2 Finish | | | | |
| 9.4.2.8.1 | | i) Vertical Formwork to: | | | | |
| | | a) Inside and outside of wall faces | m² | 32 | | |
| 9.4.2.8.2 | | b) Inside of sump face | m² | 1 | | |
| | | ii) Horizontal Formwork to: | | | | |
| 9.4.2.9 | | a) Soffits of chamber slabs | m² | 7 | | |
| 9.4.2.10 | 8.2.3 PSGA & PSG | b) Narrow widths not exceeding 350mm | m² | 24 | | |
| 9.4.2.10.1 | | iii) chamfers min 25mm x 25 mm (true to line and level) | m | 24 | | |
| 9.4.2.10.2 | 8.2.4 PSGA & PSG | iv) Box out of holes and voids, small circular from 50mm ND up to 400mm ND | No | 3 | | |
| 9.4.2.11 | 8.4.3 PSGA & PSG | i) Class 30 Mpa/19 Concrete for | | | | |
| 9.4.2.11.1 | | a) Chamber Foor, sumps and plinths | m³ | 2 | | |
| 9.4.2.11.2 | | b) Chamber Walls | m³ | 4 | | |
| 9.4.2.11.3 | | c) Chamber Slab | m³ | 2 | | |
| 9.4.2.12 | 8.3.1 PSGA & PSG | j) Schedule Reinfrocement items including supply, deliver, handling and fixing | | | | |
| 9.4.2.12.1 | | i) Steel Bars for Chamber | kg | 800 | | |
| 9.4.3 | | Concrete Marker Blocks (as per detail on drawings) | No | 12 | | |
| | | | | | Carried Forward | NAD - |

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| | | | | | **Brought forward** | **NAD -** |
| | | **OXIDATION PONDS** | | | | |
| **9.5** | 8.2.1 | **Supply, lay and bed (Class B) on bedding for flexible pipes, complete with couplings, endcap all bend for:** | | | | |
| 9.5.1 | | .01 uPVC class 6 | | | | |
| 9.5.1.1 | | a) Ø 200 mm - For link pipes between ponds | m | 32 | | |
| 9.5.1.2 | | b) Ø 315 mm -For inlet pipes into 1st anorobic pond | m | 6 | | |
| **9.5.2** | 8.2.2 | **Extra over items 8.2.1 for the suppliying, laying and bedding of uPVC specials complete with couplings:** | | | | |
| 9.5.2.1 | | .01 90 degree bends | | | | |
| 9.5.2.1.1 | | a) 315mm dia | No | Rate Only | | |
| 9.5.2.2 | | 0 45 degree bends | | | | |
| 9.5.2.2.1 | | a) 315mm dia | No | 2 | | |
| | | | | | **Total Section 1200L Carried to Summary** | **NAD -** |

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**SCHEDULE OF QUANTITIES: SECTION 10- MISCELLANEOUS**

| ITEM | SPECIFICATION | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT N$ |
|---|---|---|---|---|---|---|
| **10** | | **MISCELLANEOUS ITEMS** | | | | |
| 10.1 | | 0.1 Prefabricated Endress+Hauser ISO-Venturi 430 flume by specialist inlculding all sundires and works to install complete. | P. Sum | 1 | 200 000.00 | 200 000.00 |
| 10.2 | | 0.2 Provisional Sum for Electrical equipment for Solar Power to flow meter according to Electrical Engineer's Specification complete. | P.Sum | 1 | 100 000.00 | 100 000.00 |
| | | | | | **Total Section Miscellaneous Carried to Summary** | **NAD 300 000.00** |

**PROJECT: SESFONTEIN RISING MAIN AND OXIDATION PONDS**

**SUMMARY OF COST**

| ITEM | DESCRIPTION | AMOUNT (N$) |
|---|---|---|
| **SUMMARY OF SCHEDULE OF QUANTITIES** | | |
| SABS 1200 A | GENERAL | |
| SABS 1200 C | SITE PREPERATION | |
| SABS 1200 DA | EARTHWORKS (SMALL WORKS) | |
| SABS 1200 DB | EARTHWORKS (PIPE TRENCHES) | |
| SABS 1200 DE | EARTHWORKS (SMALL EARTH DAMS) | |
| SABS 1200 GA | CONCRETE (SMALL WORKS) | |
| SABS 1200 HA | STRUCTURAL STEELWORK | |
| SABS 1200 LB | BEDDING | |
| SABS 1200 L | MEDIUM PRESSURE PIPE LINE | |
| | MISCELLANEOUS | |
| **A) SUB TOTAL 1** | | |
| **B) CONTINGENCIES (10.0% OF Sub Total 1): (A x 10%)** | | |
| **C) SUB TOTAL 2 (A + B)** | | |
| **D) 15% VALUE ADDED TAX (VAT): (C x 15%)** | | |
| **E) TOTAL BID AMOUNT (ALL INCLUSIVE): (C + D)** | | |