

# Sands Civil Services

## Material Testing – Price List

May 2015

### Gravels

|                             |        | VAT    | Total   | TMH1 No    |
|-----------------------------|--------|--------|---------|------------|
| Atterberg Limits            | 160.00 | 19.20  | 179.20  | A2 & A3    |
| Sieve Analysis              | 160.00 | 19.20  | 179.20  | A1 (b)     |
| Foundation Indicator        | 450.00 | 54.00  | 504.00  | A6         |
| MDD/OMC (AASHTO)            | 330.00 | 39.60  | 369.60  | A7         |
| MDD/OMC (Proctor)           | 330.00 | 39.60  | 369.60  | A7         |
| CBR                         | 820.00 | 98.40  | 918.40  | A8         |
| UCS                         | 940.00 | 112.80 | 1052.80 | A14        |
| Apparent Density            | 190.00 | 22.80  | 212.80  | Roads 9208 |
| Field Density using gauge   | 140.00 | 16.80  | 156.80  | A10 (b)    |
| Sand Replacement            | 200.00 | 24.00  | 224.00  | A10 (a)    |
| Percolation Test            | 590.00 | 70.80  | 660.80  | SABS 0400  |
| Dynamic Cone Penetrometer/m | 180.00 | 21.60  | 201.60  | TMH6       |
| pH                          | 270.00 | 32.40  | 302.40  | A20        |
| Electrical Conductivity/TDS | 290.00 | 34.80  | 324.80  | A21T       |
| Compactibility              | 260.00 | 31.20  | 291.20  | SABS 1200  |
| Moisture Content            | 70.00  | 8.40   | 78.40   | A2         |
| Ball Penetration            | 240.00 | 28.80  | 268.80  | TMH6       |

### Stone/Sand

|                         |        |        |        |          |
|-------------------------|--------|--------|--------|----------|
| Sieve Analysis          | 160.00 | 19.20  | 179.20 | B4       |
| Flakiness Index         | 240.00 | 28.80  | 268.80 | B3       |
| ACV                     | 390.00 | 46.80  | 436.80 | B1       |
| 10% FACT (dry or wet)   | 880.00 | 105.60 | 985.60 | B2       |
| Loose Bulk Density      | 120.00 | 14.40  | 134.40 | B9       |
| Percentage Voids        | 290.00 | 34.80  | 324.80 | SABS 845 |
| Absorption              | 90.00  | 10.80  | 100.80 | B14      |
| Average Least Dimension | 240.00 | 28.80  | 268.80 | B18 (a)  |
| Fineness Modulus        | 80.00  | 9.60   | 89.60  | B13      |
| Reidel & Weber          | 450.00 | 54.00  | 504.00 |          |

### Concrete and Blocks/Bricks

|  |         |        |         |               |
|--|---------|--------|---------|---------------|
| Concrete Mix Design (1 <sup>st</sup> strength) | 1410.00 | 169.20 | 1579.20 | C & CI        |
| additional strengths thereafter                | 1100.00 | 132.00 | 1232.00 |               |
| Soilcrete Mix Design                           | 710.00  | 85.20  | 795.20  |               |
| Soluble Deleterious Material                   | 1290.00 | 154.80 | 1444.80 | B12           |
| Cube Crushing Strength                         | 43.00   | 5.16   | 48.16   | D1            |
| Make and crush a cube                          | 120.00  | 14.40  | 134.40  | D1            |
| Slump  | 80.00   | 9.60   | 89.60   | D3            |
| Block Crushing Strength                        | 120.00  | 14.40  | 134.40  | BOS 27        |
| Brick/Paver Crushing Strength                  | 110.00  | 13.20  | 123.20  | BOS 29/SABS22 |
| Concrete Hammer (Schmidt)                      | 140.00  | 16.80  | 156.80  |               |

### Sundry Charges

|                                 |        |       |        |
|---------------------------------|--------|-------|--------|
| Travelling/km                   | 5.00   | 0.60  | 5.60   |
| Senior Technician Standing Time | 290.00 | 34.80 | 324.80 |
| Junior Technician Standing Time | 170.00 | 20.40 | 190.40 |