

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quantity | Rate | Amount |
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| <p><b><u>SECTION NO. 1</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES</u></b></p> <p>-----</p> <p>The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these bills of quantities</p> <p>Contractors are referred to the above mentioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above mentioned documents</p> <p><b><u>PREAMBLES FOR TRADES</u></b></p> <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> <p>Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles</p> |          |      |        |
| <p><b>Carried Forward</b></p> <p>Section No. 1<br/>Bill No. 1<br/>PRELIMINARIES AND GENERAL</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          | R    |        |

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| <b>Brought Forward</b>                                                                                                                                                                                                                                                                                                                                                                                          |                                                                          | R    |
| <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles</p>                                                                                                                                                             |                                                                          |      |
| <b><u>PRICING OF PRELIMINARIES</u></b>                                                                                                                                                                                                                                                                                                                                                                          |                                                                          |      |
| <p>The contractor is required to submit a detailed breakdown, calculation and cash flow over the anticipated contract period for preliminaries with tender submission. This cash flow of preliminaries will not only be used for tender adjudication purposes on this specific project but will also serve as the basis for monthly valuation purposes (value of preliminaries included in the certificate)</p> |                                                                          |      |
| <b><u>Measurement of works</u></b>                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |      |
| <p>Please note that all measurements according to Standard System of Measurement Building Work (Quantity Surveyors Addition)</p> <p>-----</p>                                                                                                                                                                                                                                                                   |                                                                          |      |
| <b><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></b>                                                                                                                                                                                                                                                                                                                                                          |                                                                          |      |
| 1                                                                                                                                                                                                                                                                                                                                                                                                               | Clause 1.0 - Definitions and interpretation<br><br>F:.....V:.....T:..... | Item |
| 2                                                                                                                                                                                                                                                                                                                                                                                                               | Clause 2.0 - Law, Regulations and notices<br><br>F:.....V:.....T:.....   | Item |
| 3                                                                                                                                                                                                                                                                                                                                                                                                               | Clause 3.0 - Offer and acceptance<br><br>F:.....V:.....T:.....           | Item |
| 4                                                                                                                                                                                                                                                                                                                                                                                                               | Clause 4.0 - Cession and assignment<br><br>F:.....V:.....T:.....         | Item |
| <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                          |                                                                          | R    |
| Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                                                                                                                        |                                                                          |      |

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|    | Brought Forward                                                                                                                                                      |      | R |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|
| 5  | Clause 5.0 - Documents<br>F:.....V:.....T:.....                                                                                                                      | Item |   |
| 6  | Clause 6.0 - Employer's Agents<br>F:.....V:.....T:.....                                                                                                              | Item |   |
| 7  | Clause 7.0 - Design Responsibility<br>F:.....V:.....T:.....                                                                                                          | Item |   |
| 8  | Clause 8.0 - Works risk<br>F:.....V:.....T:.....                                                                                                                     | Item |   |
| 9  | Clause 9.0 - Indemnities<br>F:.....V:.....T:.....                                                                                                                    | Item |   |
| 10 | Clause 10.0 - insurances<br>F:.....V:.....T:.....                                                                                                                    | Item |   |
| 11 | Clause 11.0 - Securities<br>F:.....V:.....T:.....                                                                                                                    | Item |   |
| 12 | Clause 12.0 - Obligations of the parties<br>Clause 21.1 to be amended to read as follows: "The Employer will not issue a payment guarantee"<br>F:.....V:.....T:..... | Item |   |
| 13 | Clause 13.0 - Setting out<br>F:.....V:.....T:.....                                                                                                                   | Item |   |
| 14 | Clause 14.0 - Nominated Subcontractors<br>F:.....V:.....T:.....                                                                                                      | Item |   |
|    | Carried Forward                                                                                                                                                      |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                             |      |   |

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|    | Brought Forward                                                                        |      | R |
|----|----------------------------------------------------------------------------------------|------|---|
| 15 | Clause 15.0 - Selected Subcontractors<br>F:.....V:.....T: .....                        | Item |   |
| 16 | Clause 16.0 - Direct Contractors<br>F:.....V:.....T:.....                              | Item |   |
| 17 | Clause 17.0 - Contract instructions<br>F:.....V:.....T:.....                           | Item |   |
| 18 | Clause 18.0 - Interim Completion<br>F:.....V:.....T:.....                              | Item |   |
| 19 | Clause 19.0 - Practical Completion<br>F:.....V:.....T:.....                            | Item |   |
| 20 | Clause 20.0 - Completion in sections<br>F:.....V:.....T:.....                          | Item |   |
| 21 | Clause 21.0 - Defects liability period and final completion .<br>F:.....V:.....T:..... | Item |   |
| 22 | Clause 22.0 - Latent defects liability period<br>F:.....V:.....T:.....                 | Item |   |
| 23 | Clause 23.0 - Revision of the date for practical completion<br>F:.....V:.....T:.....   | Item |   |
|    | Carried Forward                                                                        |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                               |      |   |

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|    | Brought Forward                                                                                                                                                                                                                                                                                    |      | R |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|
| 24 | Clause 24.0 - Penalty for late or non completion<br>F:.....V:.....T:.....                                                                                                                                                                                                                          | Item |   |
| 25 | Clause 25.0 - Payment<br><br>clause 25.10 to be amended to read as follows:<br><br>"The employer shall pay the contractor the amount certified in an issued payment certificate within thirty one (31) calendar days of the date of issue of the payment certificate.<br><br>F:.....V:.....T:..... | Item |   |
| 26 | Clause 26.0 - Adjustment of the contract value and final account<br><br>F:.....V:.....T:.....                                                                                                                                                                                                      | Item |   |
| 27 | Clause 27.0 - Recovery of expense and/or loss<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                         | Item |   |
| 28 | Clause 28.0 - Suspension and termination<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                              | Item |   |
| 29 | Clause 29.0 - Termination<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                                             | Item |   |
| 30 | Clause 30.0 - Dispute resolution<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                                      | Item |   |
|    | <b><u>SECTION B - PRELIMINARIES</u></b>                                                                                                                                                                                                                                                            |      |   |
|    | <b><u>Definitions and interpretation</u></b>                                                                                                                                                                                                                                                       |      |   |
| 31 | Clause 1.0 - Definitions and interpretation<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                           | Item |   |
|    | <b><u>Documents</u></b>                                                                                                                                                                                                                                                                            |      |   |
| 32 | Clause 2.1 - Checking of documents<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                                    | Item |   |
|    | <b>Carried Forward</b>                                                                                                                                                                                                                                                                             |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                           |      |   |

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|    | Brought Forward                                                                                                                                                           |      | R |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|
| 33 | <p>Clause 2.2 - Provisional bills of quantities</p> <p>These bills of quantities are provisional and will be re-measured in its entirety</p> <p>F:.....V:.....T:.....</p> | Item |   |
| 34 | <p>Clause 2.3 - Availability of construction information</p> <p>F:.....V:.....T:.....</p>                                                                                 | Item |   |
| 35 | <p>Clause 2.4 - Ordering of materials and goods</p> <p>F:.....V:.....T:.....</p>                                                                                          | Item |   |
|    | <b><u>Previous work and adjoining properties</u></b>                                                                                                                      |      |   |
| 36 | <p>Clause 3.1 - Previous work - dimensional accuracy</p> <p>F:.....V:.....T:.....</p>                                                                                     | Item |   |
| 37 | <p>Clause 3.2 - Previous work - defects</p> <p>F:.....V:.....T:.....</p>                                                                                                  | Item |   |
| 38 | <p>Clause 3.3 - Inspection of adjoining properties</p> <p>F:.....V:.....T:.....</p>                                                                                       | Item |   |
|    | <b><u>The site</u></b>                                                                                                                                                    |      |   |
| 39 | <p>Clause 4.1 - Handover of site in stages</p> <p>F:.....V:.....T:.....</p>                                                                                               | Item |   |
| 40 | <p>Clause 4.2 - Enclosure of the works</p> <p>F:.....V:.....T:.....</p>                                                                                                   | Item |   |
| 41 | <p>Clause 4.3 - Geotechnical and other investigation</p> <p>F:.....V:.....T:.....</p>                                                                                     | Item |   |
| 42 | <p>Clause 4.4 - Encroachments</p> <p>F:.....V:.....T:.....</p>                                                                                                            | Item |   |
|    | <b>Carried Forward</b>                                                                                                                                                    |      | R |
|    | <p>Section No. 1</p> <p>Bill No. 1</p> <p>PRELIMINARIES AND GENERAL</p>                                                                                                   |      |   |

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|    | <b>Brought Forward</b>                                                            |      | R |
| 43 | Clause 4.5 - existing premises occupied<br>F:.....V:.....T:.....                  | Item |   |
| 44 | Clause 4.6 - Services - known<br>F:.....V:.....T:.....                            | Item |   |
|    | <b><u>Management of contract</u></b>                                              |      |   |
| 45 | Clause 5.1 - Deposits and fees<br>F:.....V:.....T:.....                           | Item |   |
| 46 | Clause 5.2 - Progress meetings<br>F:.....V:.....T:.....                           | Item |   |
| 47 | Clause 5.3 - Technical meetings<br>F:.....V:.....T:.....                          | Item |   |
|    | <b><u>Samples, shop drawings etc</u></b>                                          |      |   |
| 48 | Clause 6.1 - Samples of materials<br>F:.....V:.....T:.....                        | Item |   |
| 49 | Clause 6.2 - Workmanship samples<br>F:.....V:.....T:.....<br>.                    | Item |   |
| 50 | Clause 6.3 - Shop drawings<br>F:.....V:.....T:.....                               | Item |   |
| 51 | Clause 6.4 - Compliance with manufacturer's instructions<br>F:.....V:.....T:..... | Item |   |
|    | <b><u>Deposits and fees</u></b>                                                   |      |   |
| 52 | Clause 7.1 - Deposits and fees<br>F:.....V:.....T:.....                           | Item |   |
|    | <b>Carried Forward</b>                                                            |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                          |      |   |

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|    |                                                                                                                                                                                                                                                                                                                                               | <b>Brought Forward</b>           |  | R |
|    |                                                                                                                                                                                                                                                                                                                                               | <b><u>Temporary services</u></b> |  |   |
| 53 | Clause 8.1 - Water                                                                                                                                                                                                                                                                                                                            |                                  |  |   |
|    | <b>WATER</b> - The contractor to provide all necessary labour and material to make suitable connections to the existing site water reticulation system to satisfy his requirements for the execution of the works. Meters are to be installed by the contractor and the cost of consumption will be for the contractor's account.             |                                  |  |   |
|    | F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                         | Item                             |  |   |
| 54 | Clause 8.2 - Electricity                                                                                                                                                                                                                                                                                                                      |                                  |  |   |
|    | <b>ELECTRICITY</b> - The contractor to provide all necessary labour and material to make suitable connections to the existing site electricity reticulation system to satisfy his requirements for the execution of the works. Meters are to be installed by the contractor and the cost of consumption will be for the contractor's account. |                                  |  |   |
|    | F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                         | Item                             |  |   |
| 55 | Clause 8.3 -Ablution and welfare facilities                                                                                                                                                                                                                                                                                                   |                                  |  |   |
|    | <b>ABLUTIONS</b> - The contractor to provide ablution facilities.                                                                                                                                                                                                                                                                             |                                  |  |   |
|    | F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                         | Item                             |  |   |
| 56 | Clause 8.4 - Communication facilities                                                                                                                                                                                                                                                                                                         |                                  |  |   |
|    | The contractor to provide communication facilities.                                                                                                                                                                                                                                                                                           |                                  |  |   |
|    | F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                         | Item                             |  |   |
|    | <b><u>Prime Cost amounts</u></b>                                                                                                                                                                                                                                                                                                              |                                  |  |   |
| 57 | Clause 9.1 - Responsibility for prime cost amounts                                                                                                                                                                                                                                                                                            |                                  |  |   |
|    | F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                         | Item                             |  |   |
|    | <b><u>Attendance on subcontractors</u></b>                                                                                                                                                                                                                                                                                                    |                                  |  |   |
| 58 | Clause 10.1 - General attendance                                                                                                                                                                                                                                                                                                              |                                  |  |   |
|    | F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                         | Item                             |  |   |
|    |                                                                                                                                                                                                                                                                                                                                               |                                  |  |   |
|    |                                                                                                                                                                                                                                                                                                                                               | <b>Carried Forward</b>           |  | R |
|    | Section No. 1                                                                                                                                                                                                                                                                                                                                 |                                  |  |   |
|    | Bill No. 1                                                                                                                                                                                                                                                                                                                                    |                                  |  |   |
|    | PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                                                                                     |                                  |  |   |

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|    | <b>Brought Forward</b>                                                                                           |      | R |
| 59 | Clause 10.2 - Special Attendance<br><br>F:.....V:.....T:.....<br><br><b><u>General</u></b>                       | Item |   |
| 60 | Clause 11.1 - Protection of the works<br><br>F:.....V:.....T:.....                                               | Item |   |
| 61 | Clause 11.2 - Protection/isolation of existing works and works occupied in sections<br><br>F:.....V:.....T:..... | Item |   |
| 62 | Clause 11.3 - Security of the works<br><br>F:.....V:.....T:.....                                                 | Item |   |
| 63 | Clause 11.4 - Notice before covering<br><br>F:.....V:.....T:.....                                                | Item |   |
| 64 | Clause 11.5 - Disturbance<br><br>F:.....V:.....T:.....                                                           | Item |   |
| 65 | Clause 11.6 - Environmental disturbance<br><br>F:.....V:.....T:.....                                             | Item |   |
| 66 | Clause 11.7 - Works cleaning and clearing<br><br>F:.....V:.....T:.....                                           | Item |   |
| 67 | Clause 11.8 - Vermin<br><br>F:.....V:.....T:.....                                                                | Item |   |
|    | <b>Carried Forward</b>                                                                                           |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                         |      |   |

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|    | <b>Brought Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      | R |
| 68 | Clause 11.9 - Overhand work<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Item |   |
| 69 | Clause 11.10 - Tenant installations by direct contractors<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Item |   |
| 70 | Clause 11.11 - Advertising<br><br>F:.....V:.....T:.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Item |   |
|    | <b><u>SECTION C - SPECIFIC PRELIMINARIES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |   |
| 71 | Temporary storage facilities The contractor has to allow for sufficient storage facilities of at least One Office (6m x 3m) with HVAC, board room(6m x 3m) with HVAC and four storage facilities (6m x 3m) for the full duration of the contract period. The facilities should be lockable and watertight with the necessary security features (inter alia security gates, burglar proofing, etc). Temporary containers will be accepted. A dedicated area will be earmarked and pointed out to the contractor after site handover. The area should be level, fenced off with sufficient and acceptable security fencing at least 2.1m high, with one double gate at least 4m wide and acceptable surfacing around the storage facility for large trucks and heavy vehicles to drive and turn. Storm water management within this dedicated area should be of such a nature to avoid muddy areas, ponding or storm water flooding the storage area. Temporary external security lights will be required.<br>F:.....V:.....T:..... | Item |   |
| 72 | The contractor shall erect a MAIN NOTICE BOARD size 3m x 3m high containing the full description of the project, name of the client, name of the contractor and details of the professional team to the satisfaction of the Principal Agent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Item |   |
|    | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |   |

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| 73 | <b>C1.0 CONTRACT DRAWINGS</b><br><br><p>* The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the <b>works</b> and the manner in which they are to be executed</p> <p>Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the <b>principal agent</b></p> <p>Fixed: _____ Value related: _____<br/>Time related: _____</p> |                        | Item |   |
| 74 | <b>C2.0 GENERAL PREAMBLES</b><br><br><p>Fixed: _____ Value related: _____<br/>Time related: _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | Item |   |
| 75 | <b>C3.0 TRADE NAMES</b><br><br><p>Wherever a trade name for any product has been described in the <b>bills of quantities / lump sum document</b>, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the <b>principal agent</b> being obtained prior to the closing date for submission of tenders</p> <p>If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for</p> <p>Fixed: _____ Value related: _____<br/>Time related: _____</p>                     |                        | Item |   |
| 76 | <b>C4 ACCESS TO CONDOMS</b><br><br><p>Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis</p> <p>Fixed: _____ Value related: _____<br/>Time related: _____</p>                                                                                                                                                                                                                                                                                                                                                      |                        | Item |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Carried Forward</b> |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |      |   |

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| 77 | <b>C5.0 OCCUPATIONAL HEALTH AND SAFETY ACT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |      |  |   |
|    | <p>The <b>contractor</b> shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)</p> <p>It is required of the <b>contractor</b> to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the <b>bills of quantities / lump sum document</b></p> <p>The <b>contractor</b> must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the <b>principal agent</b>, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress <b>payment certificate</b> until the <b>contractor</b> provides satisfactory proof of compliance. The <b>contractor</b> shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p> <p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained</p> <p>Fixed: _____ Value related: _____<br/>Time related: _____</p> |                        | Item |  |   |
| 78 | <b>C5.1 NOTIFICATION OF CONSTRUCTION WORK (Construction Regulation 3)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |      |  |   |
|    | <p>The Contractor shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3. The Contractor shall submit the notification in writing, on the appropriate form, prior to commencement of work</p> <p>Fixed: _____ Value related: _____<br/>Time related: _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | Item |  |   |
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|    | <p>Section No. 1<br/>Bill No. 1<br/>PRELIMINARIES AND GENERAL</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |      |  |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |      |   |
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|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Brought Forward</b> |      | R |
| 79 | <b>C5.2 HEALTH AND SAFETY PLAN (Construction Regulation 5.4)</b><br><br><p>The Contractor shall provide and demonstrate to the Principal Agent a suitable and sufficiently documented health and safety plan based on the Act, Construction Regulations and the health and safety specification, which shall be applied from the date of commencement of and for the duration of the construction work. The Contractor shall ensure that a copy of the health and safety plan is available on request to an employee, inspector, sub contractor or principal agent all in terms of Regulation 5</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p> |                        | Item |   |
| 80 | <b>C5.3 REGISTRATION WITH THE COMPENSATION FUND (Construction Regulation 5.3 f)</b><br><br><p>The Contractor shall provide proof of his registration and good standing with the Compensation Fund or a licensed compensation insurer prior to the commencement of work</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                                                                                                                                                                                                                                                                          |                        | Item |   |
| 81 | <b>C5.4 HEALTH AND SAFETY FILE ( Construction Regulation 5.7)</b><br><br><p>The Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the health and safety specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Principal Agent or Inspector upon request. Upon completion of the works, the Contractor shall hand over a consolidated health and safety file to the principal agent</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                                      |                        | Item |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Carried Forward</b> |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |      |   |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |   |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|
|    | <b>Brought Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      | R |
| 82 | <b>C5.5 SUPERVISION OF CONSTRUCTION WORK<br/>(SAFETY OFFICER) (Construction Regulation 6)</b> <p>The Contractor shall appoint a full-time competent employee in writing as the construction supervisor, with the duty of supervising the construction work.</p> <p>The Contractor shall appoint a full-time or part-time construction safety officer in writing to assist in the control of all safety related aspects on the site. Such appointments are required to ensure that at all times the requirements of the Act and Construction Regulations are adhered to. Refer to Regulation 6</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                                                                                                                                                                                                                                                                                                                                                               | Item |   |
| 83 | <b>C5.6 RISK ASSESSMENT AND SAFETY POLICY<br/>(Construction Regulation 7)</b> <p>Before commencing work the Contractor shall prepare a risk assessment report to be performed by a competent person appointed in writing and the risk assessment shall form part of the health and safety plan. A copy of the risk assessment shall be available on site at all times for inspection.</p> <p>The Contractor shall at all time carry out the works in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. He shall take all precautions regarding training of employees in any hazards and the related work procedures, health and safety induction training of employees, visitors or any other persons entering the site and provide personal protective equipment to all employees and visitors to site which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property in terms of Regulation 7</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p> | Item |   |
| 84 | <b>C5.7 SIGNIFICANT HAZARDS IDENTIFICATION<br/>RISK ASSESSMENT PREPARED BY THE DESIGN<br/>CONSULTANTS</b> <p>The contractor shall allow for additional financial provision, if any, to take the necessary precautions regarding the significant hazards and risks identified and assessed by the design consultants</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Item |   |
|    | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      | R |
|    | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |      |  |   |
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|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Brought Forward</b> |      |  | R |
| 85 | <b>C5.8 ADDITIONAL FINANCIAL PROVISION</b>                                                                                                                                                                                                                                                                                                                                                                                                         |                        |      |  |   |
|    | <p>The Contractor shall allow for additional financial provision, if any, to comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993) and the Construction Regulations issued there under which have not been specifically elsewhere provided</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                                               |                        | Item |  |   |
| 86 | <b>C5.9 FALL PROTECTION PLAN (Construction Regulation 8)</b>                                                                                                                                                                                                                                                                                                                                                                                       |                        |      |  |   |
|    | <p>The contractor shall, before commencing any construction work submit a fall protection plan identified all steps to be taken in order to ensure the continued adherence to the fall protection plan and shall include a risk assessment of all work carried out from an relevant position. The fall protection plan shall form part of the health and safety plan and file</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p> |                        | Item |  |   |
| 87 | <b>C5.10 PHYSICAL AND PSYCHOLOGICAL FITNESS (Construction Regulation 8.2(b))</b>                                                                                                                                                                                                                                                                                                                                                                   |                        |      |  |   |
|    | <p>The contractor and sub-contractors shall before commencing any construction work submit proof of his employees that shall carried out work from an elevated position their physical and psychological fitness. And shall be recorded in the health and safety file</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                                                         |                        | Item |  |   |
| 88 | <b>C5.11 CONSTRUCTION VEHICLES AND MOBILE PLANT (Construction Regulation 21)</b>                                                                                                                                                                                                                                                                                                                                                                   |                        |      |  |   |
|    | <p>The contractor and sub-contractors shall ensure that all operated workers received training and been certified competent to operate such vehicle, and are physical and psychological fit to operate such construction vehicles and mobile plants. And shall be recorded in the health and safety file</p> <p>Fixed:_____ Value related:_____</p> <p>Time related:_____</p>                                                                      |                        | Item |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Carried Forward</b> |      |  | R |
|    | <p>Section No. 1</p> <p>Bill No. 1</p> <p>PRELIMINARIES AND GENERAL</p>                                                                                                                                                                                                                                                                                                                                                                            |                        |      |  |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                          |                                                                                                                                                                                                                                                                                                                           |      |     |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|
| 89                                                       | <b>C5.12 TRAINING (Construction Regulation 8 (c))</b><br><br>The contractor and sub-contractors shall, before commencing any construction work, submit his training program of all his employees. This program shall form part of the health and safety plan<br><br>Fixed:_____ Value related:_____<br>Time related:_____ | Item |     |
| 90                                                       | <b>C5.13 DEMOLITION WORK (Construction Regulation 12)</b><br><br>The contractor shall, before any demolition work shall carried out, submit all method of demolition to be used. This method shall form part of the health and safety plan and file.<br><br>Fixed:_____ Value related:_____<br>Time related:_____         | Item |     |
| 91                                                       | <b>C5.14 OHS COMPLIANCE FOR COVID 19 REQUIREMENTS</b><br><br><u><b>OHS Act and construction Regulations (2014)</b></u>                                                                                                                                                                                                    | Item |     |
| 92                                                       | Review of OHS Plan for each assignment. Rate to Include for risk assessment specific to the COVID-19 Epidemic and other adjustment to ensure compliance for the assignment                                                                                                                                                | Item |     |
| 93                                                       | Principal Contractor's Fixed Cost obligation in respect of the OHS Act and Constuction Regulations Signage-COVID - 19 Related                                                                                                                                                                                             | Item |     |
|                                                          | <u><b>Provision of Personal protective equipment and protective clothing</b></u>                                                                                                                                                                                                                                          |      |     |
| 94                                                       | Including but not restricted to Reflective Vests                                                                                                                                                                                                                                                                          | No   | 250 |
| 95                                                       | Including but not restricted to Reflective Bibs                                                                                                                                                                                                                                                                           | No   | 250 |
| 96                                                       | Including but not restricted to Hard Hats                                                                                                                                                                                                                                                                                 | No   | 250 |
| 97                                                       | Including but not restricted to Protective footwear                                                                                                                                                                                                                                                                       | No   | 250 |
| 98                                                       | Including but not restricted to Earplugs                                                                                                                                                                                                                                                                                  | No   | 250 |
| 99                                                       | Including but not restricted to Dust Masks                                                                                                                                                                                                                                                                                | No   | 250 |
| Carried Forward                                          |                                                                                                                                                                                                                                                                                                                           |      |     |
| Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL |                                                                                                                                                                                                                                                                                                                           |      |     |

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## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                                                                                                                                                                                  |        | R |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|
| 100 | Face Mask for Covid - 19 (respiratory protection (as required)                                                                                                                                                                                                                                                   | No 250 |   |
| 101 | Surgical Gloves (for security and cleaning team)                                                                                                                                                                                                                                                                 | No 250 |   |
| 102 | Safety Goggles for Screening Person                                                                                                                                                                                                                                                                              | No 250 |   |
| 103 | Provision of full time construction Health & Safety Officer                                                                                                                                                                                                                                                      | Item   |   |
|     | <b><u>Costs of medical certificate and medical surveillance</u></b>                                                                                                                                                                                                                                              |        |   |
| 104 | Initial (Baseline) medical examinations Screening for Employees with COVID-19 Symptoms                                                                                                                                                                                                                           | No 1   |   |
| 105 | Exit examinations                                                                                                                                                                                                                                                                                                | No 1   |   |
| 106 | Re-Induction Training for COVID-19                                                                                                                                                                                                                                                                               | Item   |   |
| 107 | Provision of First Aid Boxes                                                                                                                                                                                                                                                                                     | Item   |   |
| 108 | Non contact thermometers                                                                                                                                                                                                                                                                                         | No 1   |   |
|     | <b><u>Fixed Charge items</u></b>                                                                                                                                                                                                                                                                                 |        |   |
| 109 | Contractual requirements                                                                                                                                                                                                                                                                                         | Item   |   |
| 110 | Facilities for Contractor including offices, storage sheds, workshops, laboratories, living accommodation, ablution and latrine facilities, tools and equipment, water supplies, electric power, communications, setting out of Works, security and dealing with water, traffic and access. Made COVID - 19 Safe | Item   |   |
|     | <b><u>Other fixed charge obligations for Safety</u></b>                                                                                                                                                                                                                                                          |        |   |
| 111 | Hand sanitiser - 500ml                                                                                                                                                                                                                                                                                           | No 250 |   |
| 112 | Cleaning and detergents for cleaning everyday                                                                                                                                                                                                                                                                    | No 250 |   |
| 113 | Daily logbook for above                                                                                                                                                                                                                                                                                          | No 250 |   |
|     | <b><u>Waste management for COVID 19</u></b>                                                                                                                                                                                                                                                                      |        |   |
| 114 | Waste bins                                                                                                                                                                                                                                                                                                       | Item   |   |
| 115 | Cleaning and detergents for cleaning everyday                                                                                                                                                                                                                                                                    | No     |   |
|     | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                           |        | R |
|     | Section No. 1<br>Bill No. 1<br>PRELIMINARIES AND GENERAL                                                                                                                                                                                                                                                         |        |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                    |                                                                                            |      | R |
|----------------------------------------------------|--------------------------------------------------------------------------------------------|------|---|
| <b><u>GREEN BUILDING REQUIREMENTS</u></b>          |                                                                                            |      |   |
| 116                                                | The contractor is to allow for Green building requirements                                 |      |   |
|                                                    | F:.....V:.....T:.....                                                                      | Item |   |
| <b><u>CONTRACT PRICE ADJUSTMENT</u></b>            |                                                                                            |      |   |
| 117                                                | Contract Price Adjustment (Escalation) is applicable for the project                       | Item |   |
| <b><u>PAYMENT OF PRELIMINARIES AND GENERAL</u></b> |                                                                                            |      |   |
| 118                                                | Adjustment of the preliminaries and general will be effected using option A                | Item |   |
| <b><u>PROVISIONAL QUANTITIES</u></b>               |                                                                                            |      |   |
| 119                                                | All the quantities in this Bill of Quantities are provisional and subject to remeasurement | Item |   |
| <b><u>HEALTH AND SAFETY REQUIREMENTS</u></b>       |                                                                                            |      |   |
| 120                                                | Site specific Health and Safety requirements see separate document                         | Item |   |
| <b><u>READY MIX CONCRETE</u></b>                   |                                                                                            |      |   |
| 121                                                | All concrete must be Ready mix concrete                                                    | Item |   |
| <b>Carried to Final Summary</b>                    |                                                                                            |      |   |
| Section No. 1                                      |                                                                                            |      | R |
| Bill No. 1                                         |                                                                                            |      |   |
| PRELIMINARIES AND GENERAL                          |                                                                                            |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Quantity                                                  | Rate   | Amount |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------|--------|
| <b><u>SECTION NO.2</u></b><br><b><u>BILL NO. 1</u></b><br><br><b><u>ALTERATIONS</u></b><br><br><b><u>Preambles For Trade</u></b><br><br>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.<br><br><b><u>DEMOLISH STRUCTURAL STEEL</u></b><br><br><b><u>STRUCTURAL STEEL</u></b><br><br><b><u>STEEL PORTAL FRAMES</u></b><br><br><b><u>Welded portal frames with flat bearer, gusset and connection plates, bolts, angle cleats etc bolted to concrete or steel</u></b> |                                                           |        |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 254 x 146 x 43mm I-section (Double pitched portal frames) | t 2,40 |        |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 254 x 146 x 43mm I-section (Double pitched portal frames) | t 6,20 |        |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 254 x 146 x 43mm I-section (Double pitched portal frames) | t 1,80 |        |
| <b><u>STEEL TRUSSES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |        |        |
| <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                           |        | R      |
| Section No. 2<br>Bill No. 1<br>ALTERATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                           |        |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                    |                                                                                                                                                                                      |   |      |  |   |
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|                                                                                                                                    | <u>Welded roof channel truss rafters, tie beams, rails, struts, braces, cleats, cambering etc and flat bearer, gusset and connection plates, bolted to steel including paintwork</u> |   |      |  | R |
| 4                                                                                                                                  | 19192 x 3225mm high extreme (Double pitched trusses)                                                                                                                                 | t | 8,60 |  |   |
| <p><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2<br/>           Bill No. 1<br/>           ALTERATION</p> |                                                                                                                                                                                      |   |      |  | R |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quantity | Rate  | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 2</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <b><u>FOUNDATIONS (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |        |
|         | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |          |       |        |
|         | <b><u>SITE CLEARANCE ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |       |        |
|         | <b><u>Site clearance</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |       |        |
| 1       | Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc, and trees not exceeding 200mm girth. test test                                                                                                                                                                                                                                                                                                                                                                                 | m2       | 2 074 |        |
|         | <b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | <b><u>Excavation in earth not exceeding 2m deep</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |
| 2       | Trenches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m3       | 288   |        |
| 3       | Holes for column bases etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | m3       | 12    |        |
|         | <b><u>SOFT AND HARD ROCK, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |       |        |
|         | <b><u>Extra over trench and hole excavation</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |       |        |
| 4       | Soft rock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m3       | 12    |        |
| 5       | Hard rock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m3       | 9     |        |
|         | <b><u>RISK OF COLLAPSE ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | <b><u>Risk of collapse of excavations</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |
| 6       | Sides of trench and hole excavations not exceeding 1,5m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                   | m2       | 506   |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |
|         | Bill No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | EARTHWORKS (PROVISIONAL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          | R     |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                        |                                                                                                                                                                                            |      | R     |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| <b><u>FILLING ETC</u></b>                                                                                              |                                                                                                                                                                                            |      |       |
| <b><u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u></b>                             |                                                                                                                                                                                            |      |       |
| 7                                                                                                                      | Under floors, steps, paving                                                                                                                                                                | m3   | 273   |
| <b><u>Earth filing obtained from excavations and or prescribed stock piles on site compacted to 98% MOD AASHTO</u></b> |                                                                                                                                                                                            |      |       |
| 8                                                                                                                      | Under floors, steps, paving                                                                                                                                                                | m3   | 985   |
| 9                                                                                                                      | Backfilling to trenches, holes, etc                                                                                                                                                        | m3   | 46    |
| <b><u>CARTING AWAY</u></b>                                                                                             |                                                                                                                                                                                            |      |       |
| <b><u>Extra over all excavations for carting away</u></b>                                                              |                                                                                                                                                                                            |      |       |
| 10                                                                                                                     | Surplus material from stock piles on site to a dumping site to be located by the contractor                                                                                                | m3   | -428  |
| <b><u>TESTS</u></b>                                                                                                    |                                                                                                                                                                                            |      |       |
| 11                                                                                                                     | Natural California Bearing Ratio test                                                                                                                                                      | No   | 15    |
| 12                                                                                                                     | Field Density test including "Optimum Moisture Content" (Four readings per test)                                                                                                           | No   | 15    |
| <b><u>KEEPING EXCAVATIONS FROM WATER</u></b>                                                                           |                                                                                                                                                                                            |      |       |
| <b><u>Keeping excavations free from water</u></b>                                                                      |                                                                                                                                                                                            |      |       |
| 13                                                                                                                     | Keeping excavations free from all water other than subterranean water                                                                                                                      | Item |       |
| <b><u>COMPACTION</u></b>                                                                                               |                                                                                                                                                                                            |      |       |
| <b><u>Compaction of surfaces</u></b>                                                                                   |                                                                                                                                                                                            |      |       |
| 14                                                                                                                     | Compaction of ground surface under surface beds, ramps etc., including scarifying for a depth of 150mm, breaking down oversize material, trimming and compacting to 93% Mod AASHTO density | m2   | 1 287 |
| Carried Forward                                                                                                        |                                                                                                                                                                                            |      | R     |
| Section No. 2<br>Bill No. 2<br>EARTHWORKS (PROVISIONAL)                                                                |                                                                                                                                                                                            |      |       |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|                                             | Brought Forward                                                                                                                                                                                       |    |       | R |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|---|
| 15                                          | Compaction of ground surface in trenches including scarifying for a depth of 150mm, breaking down oversize material adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 444   |   |
|                                             | <b><u>SOIL POISONING</u></b>                                                                                                                                                                          |    |       |   |
|                                             | <b><u>Soil insecticide</u></b>                                                                                                                                                                        |    |       |   |
| 16                                          | To bottoms and sides of trench and hole foundations etc., including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming                                | m2 | 1 313 |   |
| 17                                          | Under floors etc. including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming                                                                       | m2 | 1 611 |   |
| Carried Forward to Summary of Section No. 2 |                                                                                                                                                                                                       |    |       | R |
| Section No. 2                               |                                                                                                                                                                                                       |    |       |   |
| Bill No. 2                                  |                                                                                                                                                                                                       |    |       |   |
| EARTHWORKS (PROVISIONAL)                    |                                                                                                                                                                                                       |    |       |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quantity                                | Rate | Amount |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------|--------|
| <b><u>BILL NO. 2</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |      |        |
| <b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |      |        |
| <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |      |        |
| The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |                                         |      |        |
| <b><u>UNREINFORCED CONCRETE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                         |      |        |
| <b><u>15MPa/19mm concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |      |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Surface blinding                        | m3   | 43     |
| <b><u>20MPa/19mm concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |      |        |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Ramps                                   | m3   | 5      |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Aprons                                  | m3   | 65     |
| <b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |      |        |
| <b><u>25MPa/19mm concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |      |        |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Surface beds etc. including thickenings | m3   | 270    |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Strip footings                          | m3   | 90     |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Ground beams                            | m3   | 49     |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Column bases                            | m3   | 14     |
| <b><u>REINFORCED CONCRETE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |      |        |
| <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |      | R      |
| Section No. 2<br>Bill No. 3<br>CONCRETE, FORMWORK AND REINFORCEMENT                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                         |      |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                                                                |    |       | R |
|----|----------------------------------------------------------------------------------------------------------------|----|-------|---|
|    | <b><u>25MPa/19mm concrete</u></b>                                                                              |    |       |   |
| 8  | Isolated beams                                                                                                 | m3 | 18    |   |
| 9  | Steps, urinal steps, cupboard platforms, etc                                                                   | m3 | 2     |   |
|    | <b><u>TEST CUBES</u></b>                                                                                       |    |       |   |
| 10 | Making and testing 150x150x150mm concrete test                                                                 |    | Item  |   |
|    | <b><u>CONCRETE SUNDRIES</u></b>                                                                                |    |       |   |
|    | <b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>                                      |    |       |   |
| 11 | Surface beds, slabs, etc.                                                                                      | m2 | 2 780 |   |
|    | <b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u></b>                                                           |    |       |   |
|    | <b><u>Smooth formwork to sides, soffits, etc.</u></b>                                                          |    |       |   |
| 12 | Walls                                                                                                          | m2 | 1     |   |
| 13 | Isolated beams propped up exceeding 1.5m and not exceeding 3.5m high above bearing level                       | m2 | 128   |   |
| 14 | Edges, risers, ends and reveals not exceeding 300mm high or wide                                               | m  | 689   |   |
|    | <b><u>MOVEMENT JOINTS ETC</u></b>                                                                              |    |       |   |
|    | <b><u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u></b> |    |       |   |
| 15 | 15mm Joints exceeding 300mm high                                                                               | m  | 320   |   |
|    | <b><u>Saw cut joints</u></b>                                                                                   |    |       |   |
| 16 | Saw cut joints in top of concrete                                                                              | m  | 320   |   |
|    | <b><u>Horizontal joggle construction joints through concrete including thick cement slurry to one face</u></b> |    |       |   |
| 17 | Slabs not exceeding 300mm thick                                                                                | m  | 40    |   |
|    | <b><u>REINFORCEMENT</u></b>                                                                                    |    |       |   |
|    | Carried Forward                                                                                                |    |       | R |
|    | Section No. 2                                                                                                  |    |       |   |
|    | Bill No. 3                                                                                                     |    |       |   |
|    | CONCRETE, FORMWORK AND REINFORCEMENT                                                                           |    |       |   |

CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                            |                                                                                                                                     |    | R     |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| <b><u>Mesh reinforcement</u></b>                                           |                                                                                                                                     |    |       |
| 18                                                                         | Standard square fabric mesh Ref 193 with nominal 6,3mm thick wires and 200 x 200mm pitch complying with SANS 1024/2006 requirements | m2 | 2 780 |
| <b><u>High tensile steel reinforcement to structural concrete work</u></b> |                                                                                                                                     |    |       |
| <b><u>REINFORCEMENT</u></b>                                                |                                                                                                                                     |    |       |
| <b><u>High tensile steel reinforcement</u></b>                             |                                                                                                                                     |    |       |
| 19                                                                         | Steel reinforcement of various diameters Including all bending and fixing                                                           | t  | 7,00  |
| Carried Forward to Summary of Section No. 2                                |                                                                                                                                     |    | R     |
| Section No. 2                                                              |                                                                                                                                     |    |       |
| Bill No. 3                                                                 |                                                                                                                                     |    |       |
| CONCRETE, FORMWORK AND REINFORCEMENT                                       |                                                                                                                                     |    |       |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate  | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 3</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |        |
|         | <b><u>MASONRY</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |       |        |
|         | <b><u>FOUNDATIONS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | <b><u>Brickwork of NFP clay bricks in class II mortar</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
| 1       | Half brick walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m2       | 31    |        |
| 2       | One brick walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m2       | 35    |        |
|         | <b><u>SUPERSTRUCTURE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |       |        |
|         | <b><u>Brickwork of NFP clay bricks in class II mortar</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
| 3       | Piers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m3       | 37    |        |
| 4       | Half brick walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m2       | 103   |        |
| 5       | Half brick walls in beamfilling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m2       | 83    |        |
| 6       | One brick walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m2       | 1 189 |        |
| 7       | One brick walls (fire wall)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | m2       | 281   |        |
| 8       | 280mm Cavity walls with two half brick outer skins and a 50mm cavity, including wall ties                                                                                                                                                                                                                                                                                                                                                                                                                             | m2       | 312   |        |
|         | <b><u>BRICKWORK SUNDRIES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |        |
|         | <b><u>Brick-on-edge header course copings, sills, etc</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
| 9       | 220mm Copings on top of one brick walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | m        | 83    |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |       | R      |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | Bill No. 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |       |        |
|         | MANSORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |       |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                               |                                                                                                                            |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------|
| <b><u>Joint forming material in movement joints</u></b>                                                                                                                       |                                                                                                                            |          |
| <b><u>2,5mm Brickwork reinforcement</u></b>                                                                                                                                   |                                                                                                                            |          |
| 10                                                                                                                                                                            | 75mm Wide reinforcement built in horizontally                                                                              | m 698    |
| 11                                                                                                                                                                            | 150mm Wide reinforcement built in horizontally                                                                             | m 5 317  |
| 12                                                                                                                                                                            | 225mm Wide reinforcement built in horizontally                                                                             | m 1 352  |
| <b><u>Prestressed pre-fabricated lintels including necessary temporary supports</u></b>                                                                                       |                                                                                                                            |          |
| 13                                                                                                                                                                            | 110 x 75mm Lintels above openings                                                                                          | m 202    |
| <b><u>Concrete Pier Cap</u></b>                                                                                                                                               |                                                                                                                            |          |
| 14                                                                                                                                                                            | 570 x 570mm x 280mm Precast concrete pier cap set level on brick pier                                                      | No 29    |
| <b><u>FACE BRICKWORK</u></b>                                                                                                                                                  |                                                                                                                            |          |
| <b><u>Roan Satin FBX, manufactured in accordance with 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and flush horizontal joints.</u></b> |                                                                                                                            |          |
| 15                                                                                                                                                                            | Extra over brickwork for face brickwork                                                                                    | m2 1 612 |
| <b><u>Brick-on-edge header course copings, sills, etc of face bricks pointed with recessed joints on all exposed faces</u></b>                                                |                                                                                                                            |          |
| 16                                                                                                                                                                            | Brick on edge coping to window sills                                                                                       | m 101    |
| 17                                                                                                                                                                            | Extra over brickwork for brick-on-edge header course lintels 1 (One) course(s) 85mm high, pointed on face and 230mm Soffit | m 128    |
| <b><u>Galvanised hoop iron cramps, ties, etc</u></b>                                                                                                                          |                                                                                                                            |          |
| 18                                                                                                                                                                            | 30x1200mm thick galvanised hook iron bent around truss and fixed with 4x40mmx2.8mm nails, built in six brickcoarses deep.  | No 890   |
| <b>Carried Forward to Summary of Section No. 2</b>                                                                                                                            |                                                                                                                            |          |
| Section No. 2                                                                                                                                                                 |                                                                                                                            |          |
| Bill No. 4                                                                                                                                                                    |                                                                                                                            |          |
| MANSORY                                                                                                                                                                       |                                                                                                                            |          |

R

R

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quantity | Rate  | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 4</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <b><u>WATERPROOFING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |        |
|         | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |          |       |        |
|         | <b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |       |        |
|         | <b><u>One layer of 375 micron black embossed polyethylene damp-proof course (SANS 952-1985 Type B)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
| 1       | In walls, under windows, etc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | m2       | 36    |        |
|         | <b><u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u></b>                                                                                                                                                                                                                                                                                                                                                                    |          |       |        |
| 2       | Under surface beds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | m2       | 1 728 |        |
|         | <b>Carried Forward to Summary of Section No. 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          | R     |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |
|         | Bill No. 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | WATERPROOFING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quantity | Rate  | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 5</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <b><u>ROOF COVERINGS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |        |
|         | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |          |       |        |
|         | <b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |       |        |
|         | <b><u>0.6mm Klip-Lok 700 profile Galvanised Z275 roof sheeting llaid in strict accordance to manufacturer's specification with concealed fixings at 25 deg Pitch on 75x50mm purlins at a max 1600mm centres. On trusses at 1200mm max centres (maximum) on 38x114mm wall plate. All bolt holes are to be drilled</u></b>                                                                                                                                                                                       |          |       |        |
| 1       | Roof coverings with pitch not exceeding 25 degrees fixed to timber purlins with 750mm c/c spacing                                                                                                                                                                                                                                                                                                                                                                                                              | m2       | 2 419 |        |
|         | <b><u>SHEET METAL FLASHINGS, LININGS, COPINGS, ETC.</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |       |        |
|         | <b><u>0.6mm thick Galvanised roof sheeting with concealed fixings, accessories</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
| 2       | Ridge flashing, attached on site to suit profile                                                                                                                                                                                                                                                                                                                                                                                                                                                               | m        | 101   |        |
| 3       | Hip flashing, attached on site to suit profile                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m        | 54    |        |
| 4       | Valley flashing, attached on site to suit profile                                                                                                                                                                                                                                                                                                                                                                                                                                                              | m        | 26    |        |
|         | <b><u>INSULATION</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          | R     |        |
|         | Section No. 2<br>Bill No. 6<br>ROOF COVERING                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |       |        |

CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                    |                                                                                                                           |    | R     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----|-------|
| <u>50mm thick polyester fibre insulation laid on strain wires over the top of purlins from apex to eaves over the entire length of building, or equal approved</u> |                                                                                                                           |    |       |
| 5                                                                                                                                                                  | Insulation laid taut over rafters (at approximately 600mm centres) and fixed concurrent with tiling battens, purlins, etc | m2 | 2 419 |
| <u>50mm fibreglass insulation</u>                                                                                                                                  |                                                                                                                           |    |       |
| 6                                                                                                                                                                  | On ceilings                                                                                                               | m2 | 632   |
| Carried Forward to Summary of Section No. 2                                                                                                                        |                                                                                                                           |    | R     |
| Section No. 2                                                                                                                                                      |                                                                                                                           |    |       |
| Bill No. 6                                                                                                                                                         |                                                                                                                           |    |       |
| ROOF COVERING                                                                                                                                                      |                                                                                                                           |    |       |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>BILL NO. 6</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |      |        |
|         | <b><u>CARPENTRY &amp; JOINERY (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
|         | <b><u>Preambles</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |      |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |      |        |
|         | <b><u>ROOFS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
|         | <b><u>TIMBER ROOF STRUCTURE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
|         | <b><u>Prefabricated metal connector plate roof trusses (Complete Structure)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
| 1       | Design, supply and erection of timber rafter and purlin regular roof trusses including trusses, rafters, bracing, joists, connections, nails, wall plates, purlins, etc (measured flat) SA Pine timber truss with 38mm x 114mm (Grade 6) rafter at 17° pitch, 38mm x 114mm (Grade 6) web members, and 38mm x 152mm (Grade 6) tie-beam, secured to load-bearing walls with galv. steel hoop-iron straps at max. 1200mm c.c. spacing, all to manufacturer's and Engineer's Specification                                | m2       | 580  |        |
|         | <b><u>Sawn softwood grade 6</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
| 2       | 38 x 114mm Beams bolted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | m        | 97   |        |
|         | <b><u>FASCIAS, BARGEBOARDS, COVER PLATES ETC.</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |      |        |
|         | <b><u>Tempered fibre-cement</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
| 3       | 12 x 225mm Fascia board countersunk screwed to roof timbers with two brass screws at maximum 1200mm centres and jointed with and including standard aluminium halfround cover strips at all joints                                                                                                                                                                                                                                                                                                                    | m        | 440  |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |      |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |      |        |
|         | Bill No. 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |      |        |
|         | CARPENTRY AND JOINERY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |      |        |

R

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                |    | R   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| <b><u>SKIRTINGS</u></b>                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                |    |     |
| <b><u>Wrought meranti</u></b>                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                |    |     |
| 4                                                                                                                                                               | 20 X 75mm high Skirtings including 19mm quadrant beading fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 600mm                                                                                                                                                    | m  | 266 |
| <b><u>DOORS</u></b>                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                |    |     |
| <b><u>Wrought meranti doors hung to steel frames</u></b>                                                                                                        |                                                                                                                                                                                                                                                                                                                                                |    |     |
| 5                                                                                                                                                               | 44mm Framed, ledged and braced batten door 877 x 2125mm high of 44 x 150mm wide top rail and stiles, 16 x 150mm middle ledge and braces and 22 x 230mm bottom ledge, filled in with 22mm V-jointed on one side vertical boarding and covered on other side with 6mm plywood veneer to match door let into and including rebates all round (D7) | No | 3   |
| <b><u>Semi solid flush doors with 3mm tempered "Masonite" veneer on both sides with concealed hardwood edges, hung to steel frames (measured elsewhere)</u></b> |                                                                                                                                                                                                                                                                                                                                                |    |     |
| 6                                                                                                                                                               | 40mm Single door 1031 x 2125mm high (D4)                                                                                                                                                                                                                                                                                                       | No | 1   |
| <b><u>Solid core flush doors with 3mm tempered "Masonite" veneer on both sides with concealed hardwood edges, hung to steel frames (measured elsewhere)</u></b> |                                                                                                                                                                                                                                                                                                                                                |    |     |
| 7                                                                                                                                                               | 40mm Single door 877 x 2125mm high (D2, D3, D6)                                                                                                                                                                                                                                                                                                | No | 23  |
| <b><u>Solid core door with 4 panels, hung to steel frames (measured elsewhere)</u></b>                                                                          |                                                                                                                                                                                                                                                                                                                                                |    |     |
| 8                                                                                                                                                               | 40mm Double door 1912 x 2032mm high (D8)                                                                                                                                                                                                                                                                                                       | No | 9   |
| <b>Carried Forward to Summary of Section No. 2</b>                                                                                                              |                                                                                                                                                                                                                                                                                                                                                |    | R   |
| Section No. 2                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                |    |     |
| Bill No. 7                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                |    |     |
| CARPENTRY AND JOINERY                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                |    |     |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>BILL NO. 7</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |      |        |
|         | <b><u>CEILINGS, BULKHEADS AND PARTITIONS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |      |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |      |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |      |        |
|         | <b><u>SUSPENDED CEILINGS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |      |        |
|         | <p><b><u>1200 x 600 x 12.5mm BPB vinyl gyprex ceiling panels (White), laid on demountable Donn T38 exposed t-suspension system, comprising galvanised main tees and cross tees with main tees suspended by means of galvanised hangers at centres not exceeding 1200mm</u></b></p>                                                                                                                                                                                                                                    |          |      |        |
| 1       | Ceilings suspended exceeding 2m and not exceeding 3m below timber and or steel purlins at 900mm centres                                                                                                                                                                                                                                                                                                                                                                                                               | m2       | 169  |        |
|         | <b><u>NAILED UP AND SCREWED UP CEILINGS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |      |        |
|         | <p><b><u>6mm Everite Nutec Fibre Cement Ceiling complete with mild steel "H" profile junction strips . Fix with 32mm galvanised nails to 50x38mm ceiling battens fixed at right angles to trusses at a max. of 400mm c/c. Treat nails and metal joiners with a metal primer.</u></b></p>                                                                                                                                                                                                                              |          |      |        |
| 2       | Ceilings suspended not exceeding 1m below timber and or steel purlins at 900mm centres                                                                                                                                                                                                                                                                                                                                                                                                                                | m2       | 239  |        |
|         | <p><b><u>6.4mm Gypsum flush plaster ceiling on suspension system including rhinolite, main and cross tees, necessary hangers, grids, etc</u></b></p>                                                                                                                                                                                                                                                                                                                                                                  |          |      |        |
| 3       | Ceilings suspended not exceeding 1m below timber and or steel purlins at 900mm centres                                                                                                                                                                                                                                                                                                                                                                                                                                | m2       | 189  |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          | R    |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |      |        |
|         | Bill No. 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |      |        |
|         | CEILING, PARTITIONS AND ACCESS FLOORING                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |      |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 4                                           | Extra over ceilings for ceiling access panel 600 x 600mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No 3     |
|                                             | <u>Acoustic ceiling boards on 50mm polystyrene insulation</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |
| 5                                           | Sloping ceilings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | m2 1 472 |
|                                             | <u>Cornices to ceilings</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |
| 6                                           | 50 x 19mm SA pine cornice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | m 506    |
| 7                                           | Upper Edge Cove Polystyrene Cornice (2000 x 60 x 60mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | m 101    |
|                                             | <u>Lafarge cornices, perimeter trims, etc. to suspended ceilings</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |
| 8                                           | 34 x 40mm recessed shadow line wall angle cornices plugged                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | m 106    |
|                                             | <u>"Gypwall drywalling system" partitioning shall comprise steel studding formed of 63.5mm Ultrasteel top and bottom tracks with vertical studs at maximum 600mm centres, friction fitted or pop-riveted to the top and bottom tracks with similar additional vertical studs as necessary at abutments, ends, etc and covered as described with wallboard screwed to studding with "Drywall" screws at maximum 220mm centres. Intersections and abutments are measured separately and descriptions shall be deemed to include any additional studs, corner beads, jointing compound, tape, etc</u> |          |
| 9                                           | 5.7m high drywalls comprising of 12.5mm Gyproc boards on both sides 1400mm high                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | m 22     |
| 10                                          | Extra over partition 5900mm high for corners                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m 2      |
| 11                                          | Extra over partition 5900mm high for fair ends                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No 2     |
| Carried Forward to Summary of Section No. 2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| Section No. 2                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| Bill No. 8                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| CEILING, PARTITIONS AND ACCESS FLOORING     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |

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# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate  | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 8</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |        |
|         | <b><u>FLOOR COVERING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |       |        |
|         | <b><u>FLOOR PREPARATION</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <p><b><u>Prepare for and apply one coat "iTeSLURRY" slurry coat, one coat "BONDiT" primer and bonding agent and minimum of 5mm thick "LEVELiT F30" self levelling screed and levelling compound laid in strict compliance with the manufacturer's specifications to a grade 1 degree of accuracy (Manufacturer;iTe Products)</u></b></p>                                                                                                                                                                              |          |       |        |
| 1       | On concrete floors to receive vinyl sheeting                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | m2       | 1 220 |        |
|         | <b><u>VINYL</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |       |        |
|         | <p><b><u>300*300 X2.5mm thick semi-flexible vinyl tiles.Laid according to manufacture 's instructions with suitable approved adhesive for the substrate on to which the product will be installed and laid by an approved contractor. PATTERNS; Allow for two colour pattern. All in accordance with the manufacturer's recommandations and installed by an approved specialist flooring subcontractor</u></b></p>                                                                                                    |          |       |        |
| 2       | On floors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | m2       | 1 220 |        |
|         | <b>Carried Forward to Summary of Section No. 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |       |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | Bill No. 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |       |        |
|         | FLOOR COVERING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |

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# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      | Quantity | Rate | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------|--------|
|         | <b><u>BILL NO. 9</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |          |      |        |
|         | <b><u>IRONMONGERY</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |      |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |      |        |
|         | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |      |          |      |        |
|         | <b><u>HINGES, BOLTS, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |      |        |
|         | <b><u>Dorma or similar approved</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |          |      |        |
| 1       | "DWC-006 Stainless Steel WC indicator and turnknob                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Sets | 8,0      |      |        |
|         | <b><u>CATCHES, CABIN HOOKS, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |          |      |        |
|         | <b><u>"Dorma" or similar approved</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |      |        |
| 2       | 'DHC -SS-031B "Stainless steel hat and coat hook with rubber buffer                                                                                                                                                                                                                                                                                                                                                                                                                                            | No   | 11       |      |        |
|         | <b><u>LOCKS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |          |      |        |
|         | <b><u>"Union" or similar approved</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |      |        |
| 3       | 37651 Lock swing over type with and including occupancy signal and emergency release                                                                                                                                                                                                                                                                                                                                                                                                                           | No   | 1        |      |        |
|         | <b><u>"Dorma" or similar approved</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |      |        |
| 4       | "DMWC-SS-008" Stainless steel bathroom deadlock                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No   | 8        |      |        |
| 5       | "DDC056001KD" Satin nickel 60mm Five pin euro-profile double Cylinder                                                                                                                                                                                                                                                                                                                                                                                                                                          | No   | 22       |      |        |
| 6       | "DBC006001" Satin nickel 60mm euro-profile double bathroom /privacy cylinder                                                                                                                                                                                                                                                                                                                                                                                                                                   | No   | 1        |      |        |
| 7       | 'D036S SS" Stainless steel cylinder sash lock                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No   | 24       |      |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |      | R      |
|         | Section No. 2<br>Bill No. 10<br>IRONMONGERY                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |          |      |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                               |      |      | R |
|----|-------------------------------------------------------------------------------|------|------|---|
| 8  | 'D037D SS' Stain steel cylinder dead lock                                     | No   | 5    |   |
| 9  | "DKC056501KD" Satin nickel 65mm Fivepin Euro-profile knob cylinder            | No   | 30   |   |
|    | <b><u>HANDLES, ETC</u></b>                                                    |      |      |   |
|    | <b><u>Dorma or equal approved</u></b>                                         |      |      |   |
| 10 | "DHP-SS-CL 150x300mm" DPH301 Pull handle                                      | No   | 3    |   |
| 11 | "DHP-SS-BL 75X170mm" DPH301 Pull handle                                       | No   | 8    |   |
| 12 | "SH875 CYL S.S" Stainless steel lever on plate with cylinder cutout           | Sets | 24,0 |   |
| 13 | "DPH301B" Stainless steel 325x25mm straight tubular pull handle flange fixing | No   | 2    |   |
| 14 | "DHP-SS-CR 150X300" DPH301 Pull handle on 150x300x1.2mm plate cylinder        | No   | 2    |   |
|    | <b><u>PUSH PLATES, KICKING PLATES ETC</u></b>                                 |      |      |   |
| 15 | "DPP-SS-BL 170x75mm" Brushed stainless steel blank push plate                 | No   | 8    |   |
| 16 | "DPP-SS-CL 150x300mm" Push plate cylinder left 150x300x1.2mm                  | No   | 2    |   |
| 17 | "DPP-SS-CR 150 x 300mm" Push plate cylinder right 150 x 300 x 1.2mm           | No   | 3    |   |
| 18 | DKP-SS-200 Kick plate size 1000 x 200 x 1.2mm                                 | No   | 2    |   |
|    | <b><u>SUNDRIES</u></b>                                                        |      |      |   |
|    | <b><u>"Dorma" or equal approved</u></b>                                       |      |      |   |
| 19 | 'DDS-NP-018 Nickel plated floor mounted door stop                             | No   | 34   |   |
|    | <b><u>LETTER, NAMEPLATES, ETC</u></b>                                         |      |      |   |
|    | <b><u>"Dorma" or equal approved</u></b>                                       |      |      |   |
| 20 | 'DSS-132 M/F" Stainless steel 150 x 150 mm Male/Female sign                   | No   | 2    |   |
| 21 | 'DSS- 133 P" Stainless Steel 150 x 150mm Disabled Persons sign                | No   | 1    |   |
|    | <b>Carried Forward</b>                                                        |      |      | R |
|    | Section No. 2                                                                 |      |      |   |
|    | Bill No. 10                                                                   |      |      |   |
|    | IRONMONGERY                                                                   |      |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|                                                                      | Brought Forward                                                                                                                                                                                                                                            |    |   |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|
| 22                                                                   | 'DSS-131 F" Stainless steel 150 x 150mm Female sign                                                                                                                                                                                                        | No | 2 |
| 23                                                                   | 'DSS- 130 M" Stainless Steel 150 x 150mm Male sign                                                                                                                                                                                                         | No | 2 |
| 24                                                                   | 'DSS-143 A Stainless steel 150 x 150 mm Arrow Sign                                                                                                                                                                                                         | No | 4 |
| 25                                                                   | 'DSS -140 RH Stainless Steel 150 x 150 mm Running Man sign                                                                                                                                                                                                 | No | 4 |
| <b><u>DOOR CLOSERS</u></b>                                           |                                                                                                                                                                                                                                                            |    |   |
| <b><u>"Dorma" or similar approved</u></b>                            |                                                                                                                                                                                                                                                            |    |   |
| 26                                                                   | TS90 EN 3/4 Cam action slide channel NON HOLD OPEN door closer - with hydraulic speed control, pull side - leaf or transform fixing, push side - leaf or transformfixing (Silver) mounted overhead door closer to door of width up to 950mm. (Provisional) | No | 5 |
| 27                                                                   | TS73V EN 2-4 Parallel arm DELAYED ACTION push side fixing including parallel arm bracket (Silver) mounted overhead door closer to door of width up to 950mm.                                                                                               | No | 1 |
| <b><u>LETTERS, NAME PLATES, ETC</u></b>                              |                                                                                                                                                                                                                                                            |    |   |
| <b><u>Approved 150x150x3mm thick PVC standard safety signage</u></b> |                                                                                                                                                                                                                                                            |    |   |
| 28                                                                   | Fire extinguisher sign plugged                                                                                                                                                                                                                             | No | 6 |
| 29                                                                   | "Arrow" sign plugged                                                                                                                                                                                                                                       | No | 6 |
| <b><u>SUNDRIES</u></b>                                               |                                                                                                                                                                                                                                                            |    |   |
| 30                                                                   | Medical aid kit hung on wall (Allow a PC Sum of R2000.00 for a medical aid kit excluding vat and including delivery to site)                                                                                                                               | No | 1 |
| <b>Carried Forward to Summary of Section No. 2</b>                   |                                                                                                                                                                                                                                                            |    |   |
| Section No. 2                                                        |                                                                                                                                                                                                                                                            |    |   |
| Bill No. 10                                                          |                                                                                                                                                                                                                                                            |    |   |
| IRONMONGERY                                                          |                                                                                                                                                                                                                                                            |    |   |

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## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quantity                                                                                      | Rate   | Amount |
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| <b><u>BILL NO. 10</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                               |        |        |
| <b><u>STRUCTURAL STEEL INSTALLATION</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                               |        |        |
| <b><u>(PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                               |        |        |
| <b><u>Preambles</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                               |        |        |
| The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |                                                                                               |        |        |
| <b><u>COLUMNS, BEAMS, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                               |        |        |
| <b><u>Welded and bolted connection column and beam roof construction to HUB</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                               |        |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 89 x 3mm Circular Hollow section columns 2975mm high with 2 x 20mm flatbar welded to one side | t 3,90 |        |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 356 x 171 x 45mm I section columns                                                            | t 5,91 |        |
| <b><u>STEEL PORTAL FRAMES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                               |        |        |
| <b><u>Welded portal frames with flat bearer, gusset and connection plates, bolts, angle cleats etc bolted to concrete or steel</u></b>                                                                                                                                                                                                                                                                                                                                                                         |                                                                                               |        |        |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 254 x 146 x 43mm I-section (Double pitched portal frames)                                     | t 2,40 |        |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 254 x 146 x 43mm I-section (Double pitched portal frames)                                     | t 6,20 |        |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 254 x 146 x 43mm I-section (Double pitched portal frames)                                     | t 1,80 |        |
| <b><u>STEEL TRUSSES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                               |        |        |
| <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                               |        | R      |
| Section No. 2<br>Bill No. 11<br>STRUCTURAL STEEL                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                               |        |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward |                                                                                                                                                                                      |        |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|                 | <u>Welded roof channel truss rafters, tie beams, rails, struts, braces, cleats, cambering etc and flat bearer, gusset and connection plates, bolted to steel including paintwork</u> |        |
| 6               | 19192 x 3225mm high extreme (Double pitched trusses)                                                                                                                                 | t 8,20 |
|                 | <b><u>PURLINS, GIRTS, BRACING, ETC</u></b>                                                                                                                                           |        |
|                 | <b><u>Purlins and girts bolted to steel</u></b>                                                                                                                                      |        |
| 7               | 200 x 75 x 20 x 3mm Cold framed lipped channel                                                                                                                                       | t 8,60 |
|                 | <b><u>Steel plates, bolted to steel</u></b>                                                                                                                                          |        |
| 8               | 268 x 148mm x 16mm Thick plate with 4 no holes                                                                                                                                       | No 10  |
| 9               | 462 x 171mm x 16mm Thick plate with 6no holes                                                                                                                                        | No 19  |
| 10              | 780 x 146mm x 16mm Thick plate with 6no holes                                                                                                                                        | No 19  |
| 11              | 550x320mmx16mm Thick plate with 6no holes                                                                                                                                            | No 16  |
|                 | <b><u>BOLTS</u></b>                                                                                                                                                                  |        |
| 12              | 16mm Diameter threaded holding down bolt 300mm long embedded in concrete with and including 70 x 70 x 10mm thick washer plate                                                        | No 136 |
|                 | <b><u>Bolts to columns, beams, etc</u></b>                                                                                                                                           |        |
| 13              | M16 Bolts                                                                                                                                                                            | No 256 |
|                 | <b>Carried Forward to Summary of Section No. 2</b>                                                                                                                                   |        |
|                 | Section No. 2                                                                                                                                                                        |        |
|                 | Bill No. 11                                                                                                                                                                          |        |
|                 | STRUCTURAL STEEL                                                                                                                                                                     |        |

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## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quantity                                      | Rate | Amount |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|--------|
| <b><u>BILL NO. 11</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                               |      |        |
| <b><u>METALWORK</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                               |      |        |
| <b><u>Preambles For Trades</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                               |      |        |
| The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |                                               |      |        |
| <b><u>PRESSED STEEL DOOR FRAMES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                               |      |        |
| <b><u>1.2mm Single rebated frames suitable for half brick walls</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                               |      |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Frame for door 877 x 2125mm high (D2, D6, D7) | No   | 16     |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Frame for door 1031 x 2125mm high (D4)        | No   | 1      |
| <b><u>1.2mm Single rebated frames suitable for one brick walls</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                               |      |        |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Frame for door 877 x 2125mm high (D2, D6, D7) | No   | 10     |
| <b><u>1.2mm Double rebated frames suitable for one brick walls</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                               |      |        |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Frame for door 1511 x 2125mm high (D5)        | No   | 2      |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Frame for door 1912 x 2400mm high (D8)        | No   | 9      |
| <b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                               |      |        |
| <b><u>French door</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                               |      |        |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Double door 1511 x 2125mm high (D5)           | No   | 2      |
| <b><u>ROLLER SHUTTER DOORS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                               |      |        |
| Carried Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                               |      | R      |
| Section No. 2<br>Bill No. 12<br>METALWORK                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                               |      |        |

**Brought Forward**

**Custom made galvanised solid slatted steel roller shutter door made to fit aperture/ opening. Serranda "solid slatted" or equal and approved equivalent. To be a galvanised finish with 1.2mm Steel frame/channel guides is/are part of roller Steel frame/channel guides is/are part of roller shutter door and is/are to be made to suit supplier end product. for standard double rebated steel frame. (SABS 1129) for 220mm wall**

3

Single leaf mild steel gate of 45 x 45 x 3mm square  
square section frame with 19mm upright rods  
through two 40 x 6mm flat mild steel rail holed and  
welded to surrounds. Upright five lever mortice  
deadlock in steel plate housing. 60 x 60 x 6mm mild  
steel plate with 13mm hole in centre fixed with 2 x  
8mm expansion bolts and drilled into concrete.  
12mm and 30mm long oin welded to frame to keep  
barrel bolt in open position. 13mm hole drilled  
15mm deep into concrete to accommodate bolt. 3 x  
120mm flat bars welded to gate and gate frame with  
25mm mild steel pin type hinge with 15mm steel pin  
inserted, 35 x 35 x 8mm mild steel flat bar welded to  
hinge, gate and gate frame. Spring loaded heavy  
duty gate holder with clip welded to gate frame with  
25 x 25 x 3mm mild steel angle iron max. 50mm long  
welded to 100 x 100 x 3mm backplate bolted to wall  
with 4 x 6mm rawl bolts, catch riveted to 75 x 75 x  
3mm mild steel backplate welded angle iron to each  
gate leaf. All in accordance with architects drawing  
(DWG No. ARC-CON-RES-102-Rev.00) Security gate  
type 1

1

Section No. 2  
Bill No. 12  
METALWORK

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  |   |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|---|
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Brought Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  | R |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p><u>Single leaf mild steel gate of 45 x 45 x 3mm square hollow section frame with 19mm upright rods through two 40 x 6mm flat mild steel rail holed and welded to surrounds. Upright five lever mortice deadlock in steel plate housing. 60 x 60 x 6mm mild steel plate with 13mm hole in centre fixed with 2 x 8mm expansion bolts and drilled into concrete. 12mm and 30mm long oin welded to frame to keep barrel bolt in open position. 13mm hole drilled 15mm deep into concrete to accommodate bolt. 3 x 120mm flat bars welded to gate and gate frame with 25mm mild steel pin type hinge with 15mm steel pin inserted, 35 x 35 x 8mm mild steel flat bar welded to hinge, gate and gate frame. Spring loaded heavy duty gate holder with clip welded to gate frame with 25 x 25 x 3mm mild steel angle iron max. 50mm long welded to 100 x 100 x 3mm backplate bolted to wall with 4 x 6mm rawl bolts, catch riveted to 75 x 75 x 3mm mild steel backplate welded angle iron to each gate leaf. All in accordance with architects drawing (DWG No. ARC-CON-RES-102-Rev.00) Security gate type 3</u></p> |   |  |   |
| 9  | Gate size 2012 x 2500mm high                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7 |  |   |
|    | <p><u>Double gate made complete with 100 x 75 x 1,6mm mild steel hollow section frame and 100 x 25 x 1,6mm mild steel hollow section vertical and horizontal main bars and 50 x 50 x 1,6mm hollow section horizontal and vertical middle cross braces and cranked sheet metal on both openings welded to gate and fitted with a pair of suitable heavy duty hinges welded to frame with locking mechanism and including stay hole with striker plate fixed to brickwork</u></p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  |   |
| 10 | Gate size 2500 x 2812mm high                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2 |  |   |
|    | <p><u>Purpose made fully louvred mild steel double swing gate with fixed louvre panels</u></p> <p>-----</p> <p><u>ALUMINIUM WINDOWS, ETC.</u></p>                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Carried Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  | R |
|    | Section No. 2<br>Bill No. 12<br>METALWORK                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                                     |                                                                            |    | R  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----|----|
| <b><u>60mm Powder coated, bronze aluminium framing<br/>NKCASA casement type for 16mm combinations as<br/>supplied by HBS systems or equally approved and<br/>to be fixed as per manufacturer's specifications<br/>glazed with 8.38mm (Double Glazing) clear float<br/>safety glazing Including Ironmongery)</u></b> |                                                                            |    |    |
| <b><u>Note: Final manufacturing dimensions to be<br/>obtained from on-site measurements.</u></b>                                                                                                                                                                                                                    |                                                                            |    |    |
| <u>Windows</u>                                                                                                                                                                                                                                                                                                      |                                                                            |    |    |
| 11                                                                                                                                                                                                                                                                                                                  | 987 x 1445mm high overall, as per architects drawings (W01)                | No | 44 |
| 12                                                                                                                                                                                                                                                                                                                  | 987 x 511mm high overall, as per architects drawings (W02)                 | No | 15 |
| 13                                                                                                                                                                                                                                                                                                                  | 1500 x 1036mm high overall, as per architects drawings (W12)               | No | 1  |
| 14                                                                                                                                                                                                                                                                                                                  | 1795 x 1500mm high overall, as per architects drawings(W15)                | No | 2  |
| 15                                                                                                                                                                                                                                                                                                                  | 967 x 1500mm high overall, as per architects drawings(W16)                 | No | 2  |
| <b><u>60mm Powder coated, bronze aluminium framing<br/>NKCASA casement type for 16mm combinations as<br/>supplied by HBS systems or equally approved and<br/>to be fixed as per manufacturer's specifications<br/>glazed with 8.38mm obscure float safety glazing<br/>including Ironmongery</u></b>                 |                                                                            |    |    |
| 16                                                                                                                                                                                                                                                                                                                  | 533 x 654mm high overall, as per architects drawings(W17)                  | No | 26 |
| <b><u>BALUSTRADES, HANDRAILS</u></b>                                                                                                                                                                                                                                                                                |                                                                            |    |    |
| <b><u>Design, supply and install wrought iron balustrade</u></b>                                                                                                                                                                                                                                                    |                                                                            |    |    |
| 17                                                                                                                                                                                                                                                                                                                  | Raking balustrades with overall height of 1100mm complete                  | m  | 11 |
| <b><u>Design, supply and install handrail</u></b>                                                                                                                                                                                                                                                                   |                                                                            |    |    |
| 18                                                                                                                                                                                                                                                                                                                  | 42mm diameter, SSHR42 stainless steel handrail,Grade 304 with satin finish | m  | 8  |
| Carried Forward                                                                                                                                                                                                                                                                                                     |                                                                            |    | R  |
| Section No. 2<br>Bill No. 12<br>METALWORK                                                                                                                                                                                                                                                                           |                                                                            |    |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                          |    |   | R |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|
| <b><u>GRABRAILS</u></b>                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                          |    |   |   |
| <b><u>Design, supply and install grab rails</u></b>                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                          |    |   |   |
| 19                                                                                                                                                                                                                                                                                                                                                                                                                    | Railman Grabrails or similar approved, Stainless steel 750x90mm 32mØ vertical / horizontal side grabrails (SR1) 300x300x300mm dog leg 32mmØ side grabrails (DL3) installed according to manufacturers specifications in positions as indicated on detailed room layouts. | m  | 3 |   |
| <b><u>GAS CAGES</u></b>                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                          |    |   |   |
| <b><u>40 x 40mm Square Hollow section frame and door sections securely bolted to wall using rawl bolt at 200mm centres with galvanised weld mesh infill to front and sides of cage, including two double gates of size 1445 x 1215mm high fixed to frame with two hinges to each gate leaf, closed at top with 0.6mm robbed roof sheeting to match roof, including headwall flashing to be fixed against wall</u></b> |                                                                                                                                                                                                                                                                          |    |   |   |
| 20                                                                                                                                                                                                                                                                                                                                                                                                                    | Gas cage size 1350mm at back sloping to 1215mm to front x 3600mm long and 600mm deep                                                                                                                                                                                     | No | 1 |   |
| <b>Carried Forward to Summary of Section No. 2</b>                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                          |    |   |   |
| Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                          |    |   |   |
| Bill No. 12                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                          |    |   |   |
| METALWORK                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                          |    |   |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate  | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 12</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | <b><u>PLASTERING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |       |        |
|         | <b><u>SCREEDS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |       |        |
|         | <b><u>Screeds on concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
| 1       | 30mm Thick on floors and landings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | m2       | 1 769 |        |
| 2       | 30mm Thick on treads and risers of stairs                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | m2       | 23    |        |
| 3       | 35mm Thick on ramps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | m2       | 47    |        |
|         | <b><u>GRANOLITHIC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | <p><b><u>Grano on concrete to be composed of 2 parts granite or other approved hard stone chippings or hard coarse washed quartzite river sand, graded to maximum size of 5mm, half part clean pit sand screened through a 2.4mm mesh sieve and one part cement.</u></b></p>                                                                                                                                                                                                                                          |          |       |        |
|         | <b><u>INTERNAL PLASTER</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |
|         | <b><u>One coat cement plaster on brickwork and concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
| 4       | On internal walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | m2       | 2 213 |        |
| 5       | On narrow widths including window cills and reveals                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | m2       | 50    |        |
|         | <b><u>One coat gypsum skim plaster finishing coat on one coat plaster on:</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | <b><u>EXTERNAL PLASTER</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          | R     |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | Bill No. 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |       |        |
|         | PLASTERING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |       |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                 |                                                                                |    |     | R |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------|----|-----|---|
| <b><u>One coat cement plaster on brickwork and concrete</u></b> |                                                                                |    |     |   |
| 6                                                               | On walls                                                                       | m2 | 218 |   |
| 7                                                               | On soffits and sides of beams, slabs, stairs etc.                              | m2 | 12  |   |
| 8                                                               | On narrow widths including window cills and reveals                            | m2 | 28  |   |
| 9                                                               | On sloping narrow width toppings to parapet walls, upstand concrete beams, etc | m2 | 28  |   |
| 10                                                              | On sloping top, edge(s) and projecting soffit(s) of copings<br>390mm girth     | m  | 70  |   |
| <b>Carried Forward to Summary of Section No. 2</b>              |                                                                                |    |     | R |
| Section No. 2                                                   |                                                                                |    |     |   |
| Bill No. 13                                                     |                                                                                |    |     |   |
| PLASTERING                                                      |                                                                                |    |     |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quantity | Rate | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>BILL NO. 13</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |      |        |
|         | <b><u>TILING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |      |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |      |        |
|         | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |          |      |        |
|         | <b><u>FLOOR TILING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |      |        |
|         | <b><u>Floor tiles (PC-Amount of R250 per sq) fixed with adhesive to screed</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                             |          |      |        |
| 1       | On floors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m2       | 323  |        |
| 2       | 100mm high scirting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | m        | 491  |        |
|         | <b><u>INTERNAL WALL TILING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |      |        |
|         | <b><u>Wall Tile (PC- amount R160 per sq) fixed with adhesive to plaster</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                |          |      |        |
| 3       | On walls in splashbacks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | m2       | 2    |        |
|         | <b>Carried Forward to Summary of Section No. 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          | R    |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |      |        |
|         | Bill No. 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |      |        |
|         | TILING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |      |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>BILL NO. 14</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |      |        |
|         | <b><u>PLUMBING &amp; DRAINAGE (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |      |        |
|         | <b><u>Preamble For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |      |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |      |        |
|         | <b><u>WASTE &amp; VENT PIPEWORK</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |      |        |
|         | <b><u>Vitrified clay gulleys</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |      |        |
| 1       | 100mm Gulley not exceeding 500mm deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No       | 8    |        |
|         | <b><u>uPVC pipes</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |      |        |
| 2       | 38mm pipes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | m        | 15   |        |
| 3       | 50mm pipes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | m        | 36   |        |
| 4       | 50mm pipes chased into brickwork                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m        | 78   |        |
| 5       | 110mm pipes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | m        | 189  |        |
| 6       | 110mm pipes laid in and including trenches not exceeding 1m                                                                                                                                                                                                                                                                                                                                                                                                                                                           | m        | 71   |        |
| 7       | 110mm pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep                                                                                                                                                                                                                                                                                                                                                                                                                                | m        | 80   |        |
| 8       | 110mm pipes laid in and including trnches exceeding 2m deep and not exceeding 3m deep                                                                                                                                                                                                                                                                                                                                                                                                                                 | m        | 45   |        |
| 9       | 110mm pipes laid in and including trenches exceeding 3m deep and not exceeding 4m deep                                                                                                                                                                                                                                                                                                                                                                                                                                | m        | 65   |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          | R    |        |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |      |        |
|         | Bill No. 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |      |        |
|         | PLUMBING AND DRAINAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |      |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

[illegible]

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|                                                       | Brought Forward                                                                                                                                                                     |    |     | R |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|---|
|                                                       | <b><u>Pipes shall be high-impact uPVC class 16 water pipes including excavations, imported G6 material filling around pipes, compaction carting away surplus material, etc.</u></b> |    |     |   |
| 26                                                    | 32mm Pipes in and including trenches not exceeding 1m deep                                                                                                                          | m  | 700 |   |
| 27                                                    | 50mm Pipes in and including trenches not exceeding 1m deep                                                                                                                          | m  | 100 |   |
| 28                                                    | 110mm pipes in and including trenches not excluding 1m deep                                                                                                                         | m  | 220 |   |
|                                                       | <b><u>Extra over class 16 uPVC pipes with solvent welded joints</u></b>                                                                                                             |    |     |   |
| 29                                                    | 32mm Bend                                                                                                                                                                           | No | 125 |   |
| 30                                                    | 32mm Tee                                                                                                                                                                            | No | 100 |   |
| 31                                                    | 32mm Reducing tee                                                                                                                                                                   | No | 75  |   |
| 32                                                    | 32mm End Cap                                                                                                                                                                        | No | 42  |   |
| 33                                                    | 50mm Bend                                                                                                                                                                           | No | 56  |   |
| 34                                                    | 50mm Tee                                                                                                                                                                            | No | 30  |   |
| 35                                                    | 50mm Reduced tee                                                                                                                                                                    | m  | 48  |   |
| 36                                                    | 50mm End Cap                                                                                                                                                                        | m  | 75  |   |
| 37                                                    | 110mm Bend                                                                                                                                                                          | No | 87  |   |
| 38                                                    | 110mm Tee                                                                                                                                                                           | No | 119 |   |
| 39                                                    | 110mm reducing tee                                                                                                                                                                  | No | 119 |   |
| 40                                                    | 110 End Cap                                                                                                                                                                         | No | 100 |   |
|                                                       | <b><u>INTERNAL WATER SUPPLIES</u></b>                                                                                                                                               |    |     |   |
|                                                       | <b><u>Class 0 copper pipes</u></b>                                                                                                                                                  |    |     |   |
| 41                                                    | 15mm Pipes                                                                                                                                                                          | m  | 83  |   |
|                                                       | Carried Forward                                                                                                                                                                     |    |     | R |
| Section No. 2<br>Bill No. 15<br>PLUMBING AND DRAINAGE |                                                                                                                                                                                     |    |     |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                                                                    |    |      |
|----|--------------------------------------------------------------------------------------------------------------------|----|------|
| 42 | 22mm Pipes                                                                                                         | m  | 62   |
| 43 | 32mm Pipes                                                                                                         | m  | 53   |
| 44 | 42mm Pipes                                                                                                         | m  | 165  |
| 45 | 50mm Pipes                                                                                                         | m  | 135  |
|    | <b><u>Extra over class 0 copper pipes for capillary fittings</u></b>                                               |    |      |
| 46 | 15mm Fittings                                                                                                      | No | 35   |
| 47 | 22mm Fittings                                                                                                      | No | 12   |
| 48 | 32mm Fitting                                                                                                       | No | 53   |
| 49 | 42mm Fittings                                                                                                      | m  | 34   |
| 50 | 50mm Fittings                                                                                                      | m  | 79   |
|    | <b><u>Class 10 HDPE type IV pipes</u></b>                                                                          |    |      |
| 51 | 25mm Diameter in and including trenches                                                                            | m  | 329  |
|    | <b><u>Extra over class 10 HDPE type IV pipes for fittings</u></b>                                                  |    |      |
| 52 | 25mm Fitting                                                                                                       | No | 219  |
|    | <b><u>Sundaries</u></b>                                                                                            |    |      |
| 53 | Unreinforced concrete (20MPa) thrust blocks in trenches, at bends, tees, etc. including excavation, formwork, etc. | m3 | 205  |
|    | <b><u>Testing</u></b>                                                                                              |    |      |
| 54 | Testing waste pipe system                                                                                          |    | Item |
|    | <b><u>SANITARY FITTINGS</u></b>                                                                                    |    |      |

R

Carried Forward

R

Section No. 2  
Bill No. 15  
PLUMBING AND DRAINAGE

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    | R   |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| <b><u>Sanitaryware - Please refer to the attached client sanitaryware specifications</u></b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |     |
| 55                                                                                           | Type 1 - WC - supply and install complete Vaal Hibiscus white vitreous china washdown suite comprising 90 degrees outlet open rim washdown pan (772654), matching 6/3 litre cistern with top dual flushing system (772656), including Cobra regulating valve (232-10) with 350mm flexi hose and jazz thermostet toilet seat with metal hinge (8531Z0)                                                                                                                                             | No | 11  |
| 56                                                                                           | Type 2 - WHB - supply and install complete Vaal Hibiscus 510 x 405mm white vitreous china rounded basin with one taphole, integrated overflow (7050), no chainstay hole, bolted to wall with two 10mm bolts (8448Z0), including 32mm Cobra cp basin waste (303), slotted without chain and stay configuration, white uPVC antivac bottle trap, Cobra Noka basin mixer tap with water saving aerator (NA-952 & P-WS/6), two 832/350F angle regulating valves and Cobra cp anti-theft plug (309-32) | No | 11  |
| 57                                                                                           | Type 1 - Urinal - supply and install complete Vaal Lavatera (705427) white vitreous china wall hung urinal 600x385x380mm, with concealed back inlet, supplied complete with 38mm cp domical grating (8787), including two hanger brackets (8127Z0). Flushing system: Cobra FJ6000 Junior Flushmaster, exposed type with ball-o-stop and wall flange, cp with FJT 5.4 urinal connection pipe and head. Trap, Cobra (345/50) cp with 75mm deep seal and adjustable telescopic pipe.                 | No | 2   |
| 58                                                                                           | Shower - supply and install Cobra Stella cp shower set with two undertile stop taps (marked hot and cold), tubular shower arm and head, and Milga stainless steel shower trap with stainless steel grating                                                                                                                                                                                                                                                                                        | No | 2   |
| 59                                                                                           | Franke Projectline Double Kitchen Sink - 1160 x 460mm (Product code PLN621) Set in joinery worktop of cupboard, inclusive of sink waste 70mm flange, 45mm long shank, chrome plated (Product code 316) and Anti vac bottle trap 40 x 40mm (product type DE22A/V)                                                                                                                                                                                                                                  | No | 3   |
| <b><u>TAPS, VALVES, ETC.</u></b>                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |     |
| <b><u>Floor outlet</u></b>                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |     |
| 60                                                                                           | uPVC floor drain with 50mm horizontal outlet and 120 x 120mm stainless steel grid                                                                                                                                                                                                                                                                                                                                                                                                                 | No | 138 |
| Carried Forward                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    | R   |
| Section No. 2<br>Bill No. 15<br>PLUMBING AND DRAINAGE                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |     |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                            |                                                                                  |    | R   |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----|-----|
| <b><u>Valves</u></b>                                                                       |                                                                                  |    |     |
| <b><u>RAIN WATER TANK</u></b>                                                              |                                                                                  |    |     |
| <b><u>Rain Water Tank</u></b>                                                              |                                                                                  |    |     |
| 61                                                                                         | 5000 (Five Thousand) Litre Water Tank, Jojo or equally approved (SABS approved). | No | 25  |
| <b><u>RAINWATER DISPOSAL</u></b>                                                           |                                                                                  |    |     |
| <b><u>0.6mm Powder coated mild steel seamless square profile gutters and downpipes</u></b> |                                                                                  |    |     |
| 62                                                                                         | 100 x 100mm galvanised gutter                                                    | m  | 290 |
| 63                                                                                         | Extra over for angle                                                             | No | 32  |
| 64                                                                                         | Extra over eaves gutter for outlet for 100mm diameter pipe                       | No | 32  |
| 65                                                                                         | Extra over for closed end                                                        | No | 10  |
| 66                                                                                         | 100 x 75mm Galvanised steel rainwater downpipe                                   | m  | 96  |
| 67                                                                                         | Extra over for shoe                                                              | No | 30  |
| <b><u>WASTE UNIONS</u></b>                                                                 |                                                                                  |    |     |
| <b><u>Cobra "Watertech" or equal approved</u></b>                                          |                                                                                  |    |     |
| 68                                                                                         | 38mm "Cobra 316" unslotted waste and plug with chain                             | No | 126 |
| <b><u>"Vaal" or equal approved</u></b>                                                     |                                                                                  |    |     |
| 69                                                                                         | Code "8794Z0" chromium plated waste and plug with chain                          | m  | 149 |
| <b><u>TRAPS</u></b>                                                                        |                                                                                  |    |     |
| <b><u>"Marley" or equal approved</u></b>                                                   |                                                                                  |    |     |
| 70                                                                                         | 40 x 300mm Sink combination for double bowl with deepseal "P" trap               | No | 5   |
| <b><u>"Cobra Watertech" or equal approved</u></b>                                          |                                                                                  |    |     |
| 71                                                                                         | Code "8790Z0" acid resistant waste and plug with chain                           | No | 10  |
| Carried Forward                                                                            |                                                                                  |    | R   |
| Section No. 2<br>Bill No. 15<br>PLUMBING AND DRAINAGE                                      |                                                                                  |    |     |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                       |                                                                                                                                                                          |       | R |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|
| <b><u>TAPS, VALVES, ETC</u></b>                       |                                                                                                                                                                          |       |   |
| <b><u>"Cobra Watertech" or equal approved</u></b>     |                                                                                                                                                                          |       |   |
| 72                                                    | Code COB-LO-214-15 chrome plated pillar tap fixed into brickwall                                                                                                         | No 12 |   |
| 73                                                    | Cobra Watertech 15mm MI x FI x 75mm long extension piece with sliding wall flange (Code: 059-15).                                                                        | No 2  |   |
| 74                                                    | "Cobra Ref. 232/350" Angle regulating valve                                                                                                                              | No 14 |   |
| 75                                                    | Cobra Ref. 296 One hole 1mm mixer with swivel outlet.                                                                                                                    | No 4  |   |
| 76                                                    | Cobra Watertech chrome plated 15mm outlet x 215mm long with 27mm offset urinal flush pipe (Code: FJT5.5).                                                                | No 17 |   |
| 77                                                    | Cobra Watertech exposed urinal chrome plated Junior Flushmaster flushvalve (code: FJ6.000) with non-hold open feature, wall flange and 20mm "Ball-o-Stop" control inlet. | No 1  |   |
| 78                                                    | Code COB-505-21B Elbow action tap                                                                                                                                        | No 1  |   |
| <b><u>GEYSERS, ETC</u></b>                            |                                                                                                                                                                          |       |   |
| <b><u>"Kwikot" or other equally approved</u></b>      |                                                                                                                                                                          |       |   |
| 79                                                    | 250 Litres Kwikot Geyser as per Architects drawings including all accessories                                                                                            | No 3  |   |
| <b><u>Sundries</u></b>                                |                                                                                                                                                                          |       |   |
| 80                                                    | 22mm Brass gate valve                                                                                                                                                    | No 3  |   |
| 81                                                    | 35mm Brass gate valve                                                                                                                                                    | No 3  |   |
| 82                                                    | 35mm Cobra watertech 1050 strainer                                                                                                                                       | No 3  |   |
| 83                                                    | PBI. 10RB Vacuum breaker                                                                                                                                                 | No 3  |   |
| 84                                                    | PA1.1RB "Kwiflo" 400kpa pressure reducing valve                                                                                                                          | No 3  |   |
| 85                                                    | Tray                                                                                                                                                                     | No 1  |   |
| <b>Carried Forward</b>                                |                                                                                                                                                                          |       | R |
| Section No. 2<br>Bill No. 15<br>PLUMBING AND DRAINAGE |                                                                                                                                                                          |       |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                       |                                                                            |    | R  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----|----|
| 86                                                                                                                                                    | 22mm Overflow pipe 500mm girth twice bent                                  | No | 1  |
| <b><u>FIRE APPLIANCES, ETC</u></b>                                                                                                                    |                                                                            |    |    |
| <b><u>"Chubb" or other equally approved</u></b>                                                                                                       |                                                                            |    |    |
| 87                                                                                                                                                    | 4.5kg Dry chemical Fire extinguisher fixed to wall                         | No | 1  |
| 88                                                                                                                                                    | 9kg Dry chemical Fire extinguisher fixed to wall                           | No | 15 |
| 89                                                                                                                                                    | 30m long Hose reel including accessories (SABS approved) fixed to the wall | No | 7  |
| <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2<br/> Bill No. 15<br/> PLUMBING AND DRAINAGE</p> |                                                                            |    | R  |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quantity                                 | Rate | Amount |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------|--------|
| <b><u>BILL NO. 15</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |      |        |
| <b><u>GLAZING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                          |      |        |
| <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |      |        |
| <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |                                          |      |        |
| <b><u>GLAZING PANELS TO TIMBER DOORS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                          |      |        |
| <b><u>6mm Clear Double Glazing glass</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                          |      |        |
| <b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                          |      |        |
| <b><u>6mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u></b>                                                                                                                                                                                                                                                                                           |                                          |      |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mirror 450 x 450mm high with four screws | No   | 11     |
| <p><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2<br/>Bill No. 16<br/>GLAZING</p>                                                                                                                                                                                                                                                                                                                                                                                                            |                                          |      | R      |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Rate  | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 16</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | <b><u>PAINTWORK</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |       |        |
|         | <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |          |       |        |
|         | <b><u>ON FLOATED PLASTER &amp; CONCRETE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <b><u>One coat plaster primer and two coats PVA paint (Plascon Broken White VEL 17)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                           |          |       |        |
| 1       | On internal plastered walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | m2       | 3 588 |        |
|         | <b><u>One coat plaster primer and two coats PVA paint</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
| 2       | On external plastered walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | m2       | 156   |        |
| 3       | On external plastered soffits and sides of beams, slabs, stairs etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | m2       | 11    |        |
|         | <b><u>ON CEILINGS &amp; PARTITIONS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |       |        |
|         | <b><u>Prepare surfaces and apply one coat plaster primer two coats PVA paint (Colour: Black)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |
| 4       | On ceilings and bulkheads                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | m2       | 1 534 |        |
| 5       | On partitions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | m2       | 256   |        |
|         | <b><u>ON FIBRE-CEMENT</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | <p><b><u>Prepare surfaces, apply Earthcote Alkali resisting primer diluted 20% with turpentine. Apply two coats Peinture, applied at 3m2 per litre per coat all as per manufacturer's specifications and application instructions (Colour: Charcoal Grey)</u></b></p>                                                                                                                                                                                                                                                 |          |       |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |       | R      |
|         | Section No. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | Bill No. 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |       |        |
|         | PAINTWORK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                             |                                                                                                                                                                                                                                             |        |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|                                             | <u>Prepare surfaces by treating nails and joints with one coat zinc chromate and apply one coat alkaline base, one universal undercoat and two coats enamel paint all as per manufacturer's specifications and application instructions</u> |        |
| 6                                           | On ceilings                                                                                                                                                                                                                                 | m2 223 |
|                                             | <b><u>ON WOOD</u></b>                                                                                                                                                                                                                       |        |
|                                             | <u>Apply one coat primer for wood, one universal undercoat and two coats 'plascon' velvaglo</u>                                                                                                                                             |        |
| 7                                           | On doors                                                                                                                                                                                                                                    | m2 115 |
|                                             | <u>One coat SPICK AND SPAN* oil based wood primer UC2. Two coats VELVAGLO polyurethane enamel VLO*</u>                                                                                                                                      |        |
|                                             | <b><u>ON METAL</u></b>                                                                                                                                                                                                                      |        |
|                                             | <u>One coat NAMELCOTE* zinc chromate primer UC 53. One coat PLASCON GALVOGRIP* metal primer. Two coats VELVAGLO* poyutherane enamel</u>                                                                                                     |        |
| 8                                           | On doors (both sides measured over the full flat area)                                                                                                                                                                                      | m2 115 |
| 9                                           | On door frames                                                                                                                                                                                                                              | m2 54  |
|                                             | <u>One coat zink chromate primer, and two coats Plascon super enamel</u>                                                                                                                                                                    |        |
| 10                                          | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)                                                                                                                                          | m2 119 |
|                                             | <u>One coat metal primer and two coats High quality Gloss enamel paint (Colour: Dove Grey)</u>                                                                                                                                              |        |
| Carried Forward to Summary of Section No. 2 |                                                                                                                                                                                                                                             |        |
| Section No. 2                               |                                                                                                                                                                                                                                             |        |
| Bill No. 17                                 |                                                                                                                                                                                                                                             |        |
| PAINTWORK                                   |                                                                                                                                                                                                                                             |        |

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CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| SECTION SUMMARY - BUILDING WORKS |                                        |  |         |   |        |
|----------------------------------|----------------------------------------|--|---------|---|--------|
| Bill No                          |                                        |  | Page No |   | Amount |
| 1                                | ALTERATION                             |  | 20      |   |        |
| 2                                | EARTHWORKS (PROVISIONAL)               |  | 23      |   |        |
| 3                                | CONCRETE, FORMWORK AND REINFORCEMENT   |  | 26      |   |        |
| 4                                | MANSORY                                |  | 28      |   |        |
| 5                                | WATERPROOFING                          |  | 29      |   |        |
| 6                                | ROOF COVERING                          |  | 31      |   |        |
| 7                                | CARPENTRY AND JOINERY                  |  | 33      |   |        |
| 8                                | CEILING, PARTTIONS AND ACCESS FLOORING |  | 35      |   |        |
| 9                                | FLOOR COVERING                         |  | 36      |   |        |
| 10                               | IRONMONGERY                            |  | 39      |   |        |
| 11                               | STRUCTURAL STEEL                       |  | 41      |   |        |
| 12                               | METALWORK                              |  | 46      |   |        |
| 13                               | PLASTERING                             |  | 48      |   |        |
| 14                               | TILING                                 |  | 49      |   |        |
| 15                               | PLUMBING AND DRAINAGE                  |  | 57      |   |        |
| 16                               | GLAZING                                |  | 58      |   |        |
| 17                               | PAINTWORK                              |  | 60      |   |        |
| Carried to Final Summary         |                                        |  |         | R |        |
| Section No. 2                    |                                        |  |         |   |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quantity | Rate  | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
|         | <b><u>BILL NO. 1</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |        |
|         | <b><u>SOCCER FIELD, COMBI COURTS (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | <b><u>FOUNDATIONS (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |
|         | <b><u>Preambles For Trades</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |          |       |        |
|         | <b><u>SITE CLEARANCE ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |       |        |
|         | <b><u>Site Clearance</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |       |        |
| 1       | Digging up and removing rubbish, debris, vegetation, hedge, shrubsm bush, etc, and trees not exceeding 200mm girth, test                                                                                                                                                                                                                                                                                                                                                                                       | m2       | 2 260 |        |
|         | <b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | <b><u>Excavation in earth not exceeding 2m deep</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |       |        |
| 2       | Trenches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m3       | 58    |        |
|         | <b><u>SOFT AND HARD ROCK, ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |       |        |
| 3       | Soft Rock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m3       | 1     |        |
|         | <b><u>Extra over trench and hole excavation</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |       |        |
|         | <b><u>RISK OF COLLAPSE ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |       |        |
|         | <b><u>Risk of collapse of excavations</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |
| 4       | Sides of trench and hole excavations not exceeding 1,5m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                   | m2       | 226   |        |
|         | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |       |        |
|         | Section No. 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |        |
|         | Bill No. 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |       |        |
|         | EXTERNAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |       |        |
|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          | R     |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|                                                                                                                  |                                                                                                                                                                                                       |    |       |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| Brought Forward                                                                                                  |                                                                                                                                                                                                       |    | R     |
| <u>Earth filling obtained from excavations and or prescribed stock piles on site compacted to 98% MOD AASHTO</u> |                                                                                                                                                                                                       |    |       |
| <u>CARTING AWAY</u>                                                                                              |                                                                                                                                                                                                       |    |       |
| <u>Extra over all excavations for carting away</u>                                                               |                                                                                                                                                                                                       |    |       |
| 5                                                                                                                | Surplus material from stock piles on site to a dumping site to be located by the contractor                                                                                                           | m3 | 58    |
| <u>TESTS</u>                                                                                                     |                                                                                                                                                                                                       |    |       |
| <u>KEEPING EXCAVATIONS FROM WATER</u>                                                                            |                                                                                                                                                                                                       |    |       |
| 6                                                                                                                | <u>Keeping excavations free from water</u>                                                                                                                                                            |    | Item  |
| <u>COMPACTION</u>                                                                                                |                                                                                                                                                                                                       |    |       |
| <u>Compaction of surfaces</u>                                                                                    |                                                                                                                                                                                                       |    |       |
| 7                                                                                                                | Compaction of ground surface under surface beds, ramps etc., including scarifying for a depth of 150mm, breaking down oversize material, trimming and compacting to 93% Mod AASHTO density            | m2 | 2 260 |
| 8                                                                                                                | Compaction of ground surface in trenches including scarifying for a depth of 150mm, breaking down oversize material adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 315   |
| <u>SOIL POISONING</u>                                                                                            |                                                                                                                                                                                                       |    |       |
| <u>Soil insecticide</u>                                                                                          |                                                                                                                                                                                                       |    |       |
| 9                                                                                                                | To bottoms and sides of trench and hole foundations etc., including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming                                | m2 | 457   |
| <u>CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)</u>                                                        |                                                                                                                                                                                                       |    |       |
| Carried Forward                                                                                                  |                                                                                                                                                                                                       |    | R     |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                    |                                                                                                                                                                                                       |    |       |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                              |    | R     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----|-------|
| <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                              |    |       |
| The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |                                                                                              |    |       |
| <b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                              |    |       |
| <b><u>20MPa/19mm concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                              |    |       |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Surface beds etc. including thickenings                                                      | m3 | 187   |
| 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Ground beams                                                                                 | m3 | 29    |
| <b><u>TEST CUBES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                              |    |       |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Making and testing 150x150x150mm concrete test                                               |    | Item  |
| <b><u>CONCRETE SUNDRIES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                              |    |       |
| <b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                              |    |       |
| 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Surface beds, slabs, etc.                                                                    | m2 | 1 861 |
| <b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                              |    |       |
| <b><u>Smooth formwork to sides, soffits, etc.</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                              |    |       |
| 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Edges, risers, ends and reveals not exceeding 300mm high or wide                             | m  | 190   |
| <b><u>Boxing in smooth formwork to form</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                              |    |       |
| 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 25 x 25mm Chamfer along bottom edges of slabs and edges of beams, top of walls, columns etc. | m  | 382   |
| <b><u>MOVEMENT JOINTS ETC</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                              |    |       |
| Carried Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                              |    | R     |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                              |    |       |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                       |    |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------|
| <b>Brought Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                       |    | <b>R</b> |
| <b><u>Vertical construction joints through concrete including thick cement slurry to one face</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                       |    |          |
| 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Surface beds not exceeding 300mm thick                                                                                                                                                                                | m  | 382      |
| <b><u>Slip joints between horizontal concrete and brick surfaces including cement mortar bed</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                       |    |          |
| <b><u>REINFORCEMENT</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                       |    |          |
| <b><u>Mesh reinforcement</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                       |    |          |
| 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Standard square fabric mesh Ref 193 with nominal 6,3mm thick wires and 200 x 200mm pitch complying with SANS 1024/2006 requirements                                                                                   | m2 | 1 861    |
| <b><u>High tensile steel reinforcement to structural concrete work</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                       |    |          |
| 18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Steel reinforcement of various diameters Including all bending and fixing                                                                                                                                             | t  | 3,00     |
| <b><u>High tensile steel dowel bars</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                       |    |          |
| 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16mm Diameter dowel bar 350mm long with one end embedded 175mm deep in side of concrete at expansion joint and other end greased with Bond breaker and wrapped in polythene sheeting, including hole through formwork | No | 848      |
| <b><u>MASONRY (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                       |    |          |
| <b><u>Preambles For Trade</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                       |    |          |
| <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |                                                                                                                                                                                                                       |    |          |
| <b><u>SUPERSTRUCTURE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                       |    |          |
| <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                       |    | <b>R</b> |
| <p>Section No. 3<br/> Bill No. 1<br/> EXTERNAL WORKS</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                       |    |          |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                               |     |  |   |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|---|
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Brought Forward</b>                                                                                                                                                        |     |  | R |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>Brickwork of NFP clay bricks in class II mortar</u></b>                                                                                                                 |     |  |   |
| 20 | Piers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m3                                                                                                                                                                            | 13  |  |   |
| 21 | One brick walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m2                                                                                                                                                                            | 42  |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>BRICKWORK SUNDRIES</u></b>                                                                                                                                              |     |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>Joint forming material in movement joints</u></b>                                                                                                                       |     |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>2,5mm Brickwork reinforcement</u></b>                                                                                                                                   |     |  |   |
| 22 | 150mm Wide reinforcement built in horizontally                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | m                                                                                                                                                                             | 474 |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>Concrete Pier Cap</u></b>                                                                                                                                               |     |  |   |
| 23 | 570 x 570mm x 280mm Precast concrete pier cap set level on brick pier                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No                                                                                                                                                                            | 19  |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>FACE BRICKWORK</u></b>                                                                                                                                                  |     |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>Roan Satin FBX, manufactured in accordance with 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and flush horizontal joints.</u></b> |     |  |   |
| 24 | Extra over brickwork for face brickwork                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | m2                                                                                                                                                                            | 161 |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>METALWORK (PROVISIONAL)</u></b>                                                                                                                                         |     |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>Preambles For Trades</u></b>                                                                                                                                            |     |  |   |
|    | <p>The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles.</p> |                                                                                                                                                                               |     |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b><u>FENCING</u></b>                                                                                                                                                         |     |  |   |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Carried Forward</b>                                                                                                                                                        |     |  | R |
|    | Section No. 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                               |     |  |   |
|    | Bill No. 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                               |     |  |   |
|    | EXTERNAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                               |     |  |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

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# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    | R  |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| <b><u>Basketball Pole</u></b>                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| 29                                            | Basketball pole formed of 127mm diameter x 4mm thick hollow section 3,9m long with mushroom cap welded onto top end and 250 x 250 x 6mm flat section base plate welded onto bottom end, the pole with and including support for netball net (elsewhere) formed of 16mm diameter rod ring to 380mm internal diameter with 16mm square section L-shaped arm 250mm girth welded onto pole and onto ring; L-shaped arm 2,913m girth formed of 102mm diameter x 2,8mm thick hollow section with one end welded onto pole and other end welded closed with 6mm flat section; stay formed of 102mm diameter x 2,8mm thick hollow section 1,602m long extreme with ends scribed and welded onto pole and arm; 1200 x 450 x 6mm flat section mounting plate eight times holed for bolts (elsewhere) and with three 450 x 60 x 6mm overall flat section flanges welded onto mounting plate and scribed as necessary and welded onto L-shaped arm including setting up unit and embedding in position complete in concrete base (elsewhere) as detailed on combi court details | No | 2  |
| <b><u>Basketball ring</u></b>                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| 30                                            | Support for basketball net (elsewhere) formed of 16mm diameter rod ring to 450mm internal diameter with 60 x 10mm flat section L-shaped arm 300mm girth and with two 10mm diameter rod supporting arms each 500mm girth twice bent and welded onto ring and onto and including 450 x 350 x 6mm flat section backing plate four times holed for bolts (elsewhere) including bolting unit in position complete to steel framework (elsewhere) as detailed on combi court details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No | 2  |
| <b><u>Basketball netting</u></b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| <b><u>Basketball backing board</u></b>        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| 31                                            | 10mm diameter screw bolts with nuts and washers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No | 16 |
| 32                                            | 25 x 25 x 1,8mm Square hollow section framing holed for and bolted to 18mm thick timber backboard (elsewhere) with and including 6mm diameter galvanised gutter bolts at 400mm centres                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | m  | 18 |
| 33                                            | Extra for welded T-intersection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No | 16 |
| Carried Forward                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    | R  |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |    | R  |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| 34                                            | Hole through both 2,5mm thick sides of hollow section and 18mm thick timber backboard for 10mm diameter bolt (elsewhere)                                                                                                                                                                                                                                                                                            | No | 16 |
| 35                                            | 18mm marine ply timber backing board of size 1600 x 1200mm including paint to one side with one coat primer, one coat universal undercoat and two coats white enamel, including 50mm wide red enamel lines to perimeter of backing board                                                                                                                                                                            | No | 2  |
| <b><u>Sleeve for removable poles</u></b>      |                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| 36                                            | Sleeve for removable pole formed of 102mm diameter x 2,5mm thick hollow section 700mm long with 140 x 140 x 10mm flat section flange with machine bevelled and scribed opening to suit sleeve diameter welded onto top end and with 250 x 250 x 6mm flat section base plate welded onto bottom end including setting up and embedding in position complete including cast into 600 x 600 x 100mm deep concrete base | No | 2  |
| <b><u>Netball poles and net</u></b>           |                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| 37                                            | Removable netball pole formed of 89mm diameter x 4mm thick hollow section 3,9m long with mushroom cap welded onto top, the pole with and including support for netball net (elsewhere) formed of 16mm diameter rod ring to 380mm internal diameter with 16mm square section L-shaped arm 250mm girth welded onto pole and onto ring including setting up unit in position complete in sleeve                        | No | 2  |
| 38                                            | Netball net including fixing in position complete to netball ring (elsewhere)                                                                                                                                                                                                                                                                                                                                       | No | 4  |
| <b><u>Tennis poles and net</u></b>            |                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |
| 39                                            | Removable netball pole formed of 89mm diameter x 4mm thick hollow section 3,9m long with mushroom cap welded onto top, the pole with and including support for netball net (elsewhere) formed of 16mm diameter rod ring to 380mm internal diameter with 16mm square section L-shaped arm 250mm girth welded onto pole and onto ring including setting up unit in position complete in sleeve                        | No | 2  |
| 40                                            | Tennis court net and handing over to the Representative/Agent                                                                                                                                                                                                                                                                                                                                                       | No | 1  |
| Carried Forward                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |    | R  |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS |                                                                                                                                                                                                                                                                                                                                                                                                                     |    |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                   |    | R     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| <b><u>Volleyball poles and net</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| 41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Removable volleyball pole formed of 89mm diameter x 4mm thick hollow section 3,3m long with mushroom cap welded onto top, the pole with and including four net straining eyes formed of 8mm diameter rod welded onto pole including setting up unit in position complete in sleeve (elsewhere) and later removing and handing over to the Representative/Agent as detailed on combi court details | No | 2     |
| 42                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Volleyball net and handing over to the Representative/Agent                                                                                                                                                                                                                                                                                                                                       | No | 2     |
| <b><u>PLASTERING (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| <b><u>Preambles</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| <b><u>SCREEDS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| <b><u>Screeds on concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| 43                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 30mm Thick on floors and landings                                                                                                                                                                                                                                                                                                                                                                 | m2 | 1 861 |
| <b><u>Screeds on concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| <b><u>EXTERNAL PLASTER</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| <b><u>One coat cement plaster on brickwork and concrete</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |
| 44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | On walls                                                                                                                                                                                                                                                                                                                                                                                          | m2 | 42    |
| 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | On sloping top, edge(s) and projecting soffit(s) of copings<br>390mm girth                                                                                                                                                                                                                                                                                                                        | m  | 18    |
| Carried Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                   |    | R     |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |    |       |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |       |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|    | <b>Brought Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |       |
|    | <b><u>Allow for top layer of the Combi Court finish (PC amount of R450 per m2)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                         |    |       |
| 46 | On surface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | m2 | 2 096 |
|    | <b><u>PAINTWORK (PROVISIONAL)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |       |
|    | The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles. |    |       |
|    | <b><u>ON FLOATED PLASTER &amp; CONCRETE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |       |
|    | <b><u>One coat plaster primer and two coats PVA paint</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |       |
| 47 | On external plastered walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | m2 | 43    |
|    | <b><u>ROAD MARKING</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |       |
|    | <b><u>Prepare and apply one coat YELLOW reflective road marking paint on concrete surface bed</u></b>                                                                                                                                                                                                                                                                                                                                                                                                          |    |       |
| 48 | 50mm wide line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m  | 254   |
|    | <b><u>Prepare and apply one coat BLUE reflective road marking paint on concrete surface bed</u></b>                                                                                                                                                                                                                                                                                                                                                                                                            |    |       |
| 49 | 50mm wide line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m  | 86    |
|    | <b><u>Prepare and apply one coat WHITE reflective road marking paint on concrete surface bed</u></b>                                                                                                                                                                                                                                                                                                                                                                                                           |    |       |
| 50 | 50mm wide line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m  | 176   |
|    | <b><u>Prepare and apply one coat RED reflective road marking paint on concrete surface bed</u></b>                                                                                                                                                                                                                                                                                                                                                                                                             |    |       |
| 51 | 50mm wide line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m  | 151   |
|    | <b><u>COVERED WALKWAYS, ASSEMBLY POINT AND PAVING IN BETWEEN BUILDINGS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |       |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |       |
|    | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |       |
|    | Section No. 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |       |
|    | Bill No. 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |       |
|    | EXTERNAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |       |

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# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                  |                                                                                                                    |        |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------|
| <b><u>EARTHWORKS</u></b>                                                                         |                                                                                                                    |        |
| <b><u>SITE CLEARANCE ETC</u></b>                                                                 |                                                                                                                    |        |
| <b><u>Site clearance</u></b>                                                                     |                                                                                                                    |        |
| 52                                                                                               | Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth | m2 714 |
| <b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>                                           |                                                                                                                    |        |
| <b><u>Excavation in earth other than bulk not exceeding 2m deep</u></b>                          |                                                                                                                    |        |
| 53                                                                                               | Trenches                                                                                                           | m3 122 |
| <b><u>SOFT AND HARD ROCK, ETC</u></b>                                                            |                                                                                                                    |        |
| <b><u>Extra over trench and hole excavations in earth other than bulk for excavation in:</u></b> |                                                                                                                    |        |
| 54                                                                                               | Soft Rock                                                                                                          | m3 25  |
| 55                                                                                               | Hard Rock                                                                                                          | m3 18  |
| <b><u>CARTING AWAY</u></b>                                                                       |                                                                                                                    |        |
| <b><u>Extra over all excavations for carting away</u></b>                                        |                                                                                                                    |        |
| 56                                                                                               | Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor    | m3 179 |
| <b><u>RISK OF COLLAPSE ETC</u></b>                                                               |                                                                                                                    |        |
| <b><u>Risk of collapse of excavations</u></b>                                                    |                                                                                                                    |        |
| 57                                                                                               | Sides of trench and hole excavations not exceeding 1,5m deep                                                       | m2 329 |
| <b><u>KEEPING EXCAVATIONS FROM WATER</u></b>                                                     |                                                                                                                    |        |
| <b><u>Keeping excavations free of water</u></b>                                                  |                                                                                                                    |        |
| 58                                                                                               | Keeping excavations free of all water other than subterranean water                                                | Item   |
| <b>Carried Forward</b>                                                                           |                                                                                                                    |        |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                    |                                                                                                                    |        |

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# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward |                                                                                                                                      |          |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|----------|
|                 | <u><b>G5 or approved material filling supplied by the contractor, compacted to 95% Mod AASHTO density</b></u>                        |          |
| 59              | Under floors, steps, pavings, etc                                                                                                    | m3 300   |
|                 | <u><b>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 85% Mod AASHTO density</b></u> |          |
| 60              | Backfilling to trenches, holes, etc                                                                                                  | m3 1 204 |
|                 | <u><b>SOIL POISONING</b></u>                                                                                                         |          |
|                 | <u><b>Soil insecticide in accordance with SANS 5859</b></u>                                                                          |          |
| 61              | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming        | m2 714   |
| 62              | To bottoms and sides of trenches etc                                                                                                 | m2 329   |
|                 | <u><b>CONCRETE, FORMWORK AND REINFORCEMENT</b></u>                                                                                   |          |
|                 | <u><b>25MPa/19mm reinforced concrete cast against excavated surfaces</b></u>                                                         |          |
| 63              | Strip footings                                                                                                                       | m3 350   |
|                 | <u><b>15MPa/19mm reinforced concrete cast against excavated surfaces</b></u>                                                         |          |
| 64              | Surface beds                                                                                                                         | m3 252   |
|                 | <u><b>Test Cubes</b></u>                                                                                                             |          |
| 65              | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)                                                       | No 21    |
|                 | <u><b>CONCRETE SUNDRIES</b></u>                                                                                                      |          |
|                 | <u><b>Finishing top surfaces of concrete smooth with a wood float</b></u>                                                            |          |
| 66              | Surface beds, slabs, etc.                                                                                                            | m2 2 524 |
|                 | <u><b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b></u>                                                                                 |          |
|                 |                                                                                                                                      |          |
|                 | Carried Forward                                                                                                                      |          |
|                 | Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                        |          |

R

R

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                                                                                                                                                                                                                      |    |        | R |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------|---|
|    | <b><u>Saw-cut joints</u></b>                                                                                                                                                                                                                                         |    |        |   |
| 67 | 3 x 10mm Saw-cut joints in top of concrete with bevelled top corners in top of concrete                                                                                                                                                                              | m  | 822    |   |
|    | <b><u>REINFORCEMENT</u></b>                                                                                                                                                                                                                                          |    |        |   |
|    | <b><u>Mesh reinforcement</u></b>                                                                                                                                                                                                                                     |    |        |   |
| 68 | Standard square fabric mesh Ref 193 with nominal 6,3mm thick wires and 200 x 200mm pitch complying with SANS 1024/2006 requirements                                                                                                                                  | m2 | 2 524  |   |
|    | <b><u>Mild steel reinforcement to structural concrete work</u></b>                                                                                                                                                                                                   |    |        |   |
| 69 | 12mm Diameter bars                                                                                                                                                                                                                                                   | t  | 21,00  |   |
|    | <b><u>MASONRY</u></b>                                                                                                                                                                                                                                                |    |        |   |
|    | <b><u>FOUNDATIONS (PROVISIONAL)</u></b>                                                                                                                                                                                                                              |    |        |   |
|    | <b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar</u></b>                                                                                                                                                                       |    |        |   |
| 70 | One brick walls                                                                                                                                                                                                                                                      | m2 | 979    |   |
|    | <b><u>Roan Satin FBX, manufactured in accordance with 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and flush horizontal joints.</u></b>                                                                                        |    |        |   |
| 71 | Extra over brickwork for face brickwork                                                                                                                                                                                                                              | m2 | 979    |   |
| 72 | Coping on top of one brick wall                                                                                                                                                                                                                                      | m  | 2 328  |   |
|    | <b><u>BRICKWORK SUNDRIES</u></b>                                                                                                                                                                                                                                     |    |        |   |
|    | <b><u>Brickwork reinforcement</u></b>                                                                                                                                                                                                                                |    |        |   |
| 73 | 150mm Wide reinforcement built in horizontally                                                                                                                                                                                                                       | m  | 11 501 |   |
|    | <b><u>60mm Thick 25MPa precast concrete interlocking block paving of 200 x 100mm grey paving blocks in accordance with SANS 1058, laid to falls on and including 20mm thick sand layer with joints filled in with sand, compacted with a vibration compactor</u></b> |    |        |   |
| 74 | Paving of 60mm thick blocks including edge blocks                                                                                                                                                                                                                    | m2 | 6 981  |   |
|    | <b>Carried Forward</b>                                                                                                                                                                                                                                               |    |        | R |
|    | Section No. 3                                                                                                                                                                                                                                                        |    |        |   |
|    | Bill No. 1                                                                                                                                                                                                                                                           |    |        |   |
|    | EXTERNAL WORKS                                                                                                                                                                                                                                                       |    |        |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                                    |    |       |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|    | <b>Brought Forward</b>                                                                                                                                                                                                             |    |       |
|    | <u>Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m²</u>                           |    |       |
| 75 | Under paving etc                                                                                                                                                                                                                   | m2 | 6 981 |
|    | <b><u>WATERPROOFING</u></b>                                                                                                                                                                                                        |    |       |
|    | <u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u>                                                                                               |    |       |
| 76 | Under surface beds                                                                                                                                                                                                                 | m2 | 631   |
|    | <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or other equal and approved embossed damp proof course</u>                                                                                                               |    |       |
| 77 | In walls                                                                                                                                                                                                                           | m2 | 128   |
|    | <b><u>ROOF COVERINGS ETC</u></b>                                                                                                                                                                                                   |    |       |
|    | <b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>                                                                                                                                                                              |    |       |
|    | <u>0.6mm Thick Galvanised roof sheeting with concealed fixings at 25 deg Pitch on 75x50mm purlins at a max 1600mm centres. On trusses at 1200mm max centres (maximum) on 38x114mm wall plate. All bolt holes are to be drilled</u> |    |       |
| 78 | Roof covering with pitch not exceeding 25 degrees                                                                                                                                                                                  | m2 | 694   |
|    | <b><u>STRUCTURAL STEELWORK</u></b>                                                                                                                                                                                                 |    |       |
|    | <u>Welded columns in single lengths with flat base, mitred bearer and welded connection to beams (beams measured elsewhere), bolted to concrete</u>                                                                                |    |       |
| 79 | 89 x 3mm circular hollow section columns                                                                                                                                                                                           | t  | 5,52  |
| 80 | Extra on last for mitred corners                                                                                                                                                                                                   | No | 167   |
| 81 | Base plates 150mm x 150mm x 6mm thick, holed four times and welded to columns (columns measured elsewhere)                                                                                                                         | No | 167   |
|    | <b>Carried Forward</b>                                                                                                                                                                                                             |    |       |
|    | Section No. 3                                                                                                                                                                                                                      |    |       |
|    | Bill No. 1                                                                                                                                                                                                                         |    |       |
|    | EXTERNAL WORKS                                                                                                                                                                                                                     |    |       |

R

R

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                |                                                                                                           |      | R          |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------|------------|
| <b><u>Welded beams in single lengths with mitred corners and welded connection to columns (columns measured elsewhere)</u></b> |                                                                                                           |      |            |
| 82                                                                                                                             | 89 x 3mm circular hollow section beams cranked in the middle to give a 3 degree pitch                     | t    | 1,23       |
| <b><u>BOLTS, FASTENERS, ETC</u></b>                                                                                            |                                                                                                           |      |            |
| 83                                                                                                                             | M12 chemical anchor bolts                                                                                 | No   | 666        |
| <b><u>Purlins welded to steel</u></b>                                                                                          |                                                                                                           |      |            |
| 84                                                                                                                             | 60 x 40 x 2.5mm thick rectangular hollow section mild steel purlins                                       | t    | 7,69       |
| <b><u>Carports, etc</u></b>                                                                                                    |                                                                                                           |      |            |
| <b><u>Carports</u></b>                                                                                                         |                                                                                                           |      |            |
| 85                                                                                                                             | Allow R750, 000 (Seven hundred and fifty thousand Rands) for Carports.                                    | Item | 750 000,00 |
| <b><u>CONCRETE STORMWATER CHANNELS</u></b>                                                                                     |                                                                                                           |      |            |
| <b><u>EARTHWORKS (PROVISIONAL)</u></b>                                                                                         |                                                                                                           |      |            |
| <b><u>SITE CLEARANCE ETC</u></b>                                                                                               |                                                                                                           |      |            |
| <b><u>Site clearance</u></b>                                                                                                   |                                                                                                           |      |            |
| 86                                                                                                                             | Stripping average 100mm thick layer of top soil and depositing material in prescribed stock piles on site | m2   | 627        |
| <b><u>COMPACTION</u></b>                                                                                                       |                                                                                                           |      |            |
| <b><u>Compaction of surfaces</u></b>                                                                                           |                                                                                                           |      |            |
| 87                                                                                                                             | Compaction of ground surfaces under concrete channels by wetting and compacting with vibratory roller     | m2   | 627        |
| <b><u>SOIL POISONING</u></b>                                                                                                   |                                                                                                           |      |            |
| <b><u>Soil insecticide</u></b>                                                                                                 |                                                                                                           |      |            |
| Carried Forward                                                                                                                |                                                                                                           |      | R          |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                  |                                                                                                           |      |            |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                           |                                                                                                                                                                      |    | R   |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| <b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>                        |                                                                                                                                                                      |    |     |
| 88                                                                        | Soil insecticide in accordance with SANS 5859, under floors                                                                                                          | m2 | 107 |
| <b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>       |                                                                                                                                                                      |    |     |
| <b><u>15MPa/19mm concrete</u></b>                                         |                                                                                                                                                                      |    |     |
| 89                                                                        | 15MPa insitu concrete channels of 600mm width, laid to even falls of 225 x 225 x 50mm deep and 75mm stopped ends on each side, cast in panels of size 1800 x 600mm   | m  | 924 |
| 90                                                                        | 20MPa insitu concrete channels of 600mm width, laid to even falls of 225 x 225mm x 50mm deep and 75mm stopped ends on each side, cast in panels of size 1800 x 600mm | m  | 334 |
| <b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>         |                                                                                                                                                                      |    |     |
| 91                                                                        | 25MPa insitu concrete channels of 600mm width, laid to even falls of 225 x 225mm x 50mm deep and 75mm stopped ends on each side, cast in panels of size 1800 x 600mm | m  | 353 |
| 92                                                                        | 20MPa concrete ramp to falls on                                                                                                                                      | m3 | 3   |
| 93                                                                        | 20MPa concrete surface bed                                                                                                                                           | m3 | 2   |
| <b><u>CONCRETE SUNDRIES</u></b>                                           |                                                                                                                                                                      |    |     |
| <b><u>Finishing top surfaces of concrete smooth with a wood float</u></b> |                                                                                                                                                                      |    |     |
| 94                                                                        | Finishing tops of concrete channel surface with wood float to falls                                                                                                  | m2 | 662 |
| 95                                                                        | 6mm thick fibre cement permanent shuttering                                                                                                                          | m2 | 20  |
| <b><u>REINFORCEMENT</u></b>                                               |                                                                                                                                                                      |    |     |
| Carried Forward                                                           |                                                                                                                                                                      |    | R   |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                             |                                                                                                                                                                      |    |     |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward |                                                                                                                                     |    | R  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|----|----|
|                 | <b><u>Mesh reinforcement</u></b>                                                                                                    |    |    |
| 96              | Standard square fabric mesh Ref 245 with nominal 6,3mm thick wires and 200 x 200mm pitch complying with SANS 1024/2006 requirements | m2 | 20 |
|                 | <b><u>MASONRY</u></b>                                                                                                               |    |    |
|                 | <b><u>SUPERSTRUCTURE</u></b>                                                                                                        |    |    |
|                 | <b><u>Brickwork of NFP clay bricks in class II mortar</u></b>                                                                       |    |    |
| 97              | Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar for brick-on-edge 1 course high                    | m  | 66 |
|                 | <b><u>DRINKING FOUNTAIN</u></b>                                                                                                     |    |    |
|                 | <b><u>EARTHWORKS (PROVISIONAL)</u></b>                                                                                              |    |    |
|                 | <b><u>SITE CLEARANCE ETC</u></b>                                                                                                    |    |    |
|                 | <b><u>Site clearance</u></b>                                                                                                        |    |    |
| 98              | Stripping average 150mm thick layer of top soil and depositing material in prescribed stock piles on site                           | m2 | 15 |
|                 | <b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>                                                                              |    |    |
|                 | <b><u>Excavation in earth not exceeding 2m deep</u></b>                                                                             |    |    |
| 99              | Excavation in earth not exceeding 2m deep for holes size 300 x 300 x 300mm deep                                                     | No | 13 |
|                 | <b><u>COMPACTION</u></b>                                                                                                            |    |    |
|                 | <b><u>Compaction of surfaces</u></b>                                                                                                |    |    |
| 100             | Compaction of ground surfaces under concrete channels by wetting and compacting with vibratory roller                               | m2 | 15 |
| 101             | 100mm thick (Class D) concrete to falls to grating over gully                                                                       | m2 | 5  |
|                 | <b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>                                                                 |    |    |
|                 | <b>Carried Forward</b>                                                                                                              |    | R  |
|                 | Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                       |    |    |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                                                                                                |    |    | R |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|---|
|     | <b><u>15MPa/19mm concrete</u></b>                                                                                                                                                                                              |    |    |   |
| 102 | 15MPa concrete footing of size 300 x 300 x 300mm deep                                                                                                                                                                          | No | 10 |   |
|     | <b><u>CONCRETE SUNDRIES</u></b>                                                                                                                                                                                                |    |    |   |
|     | <b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>                                                                                                                                                      |    |    |   |
| 103 | Finishing tops of concrete surface with wood float to falls                                                                                                                                                                    | m2 | 11 |   |
|     | <b><u>REINFORCEMENT</u></b>                                                                                                                                                                                                    |    |    |   |
|     | <b><u>Mesh reinforcement</u></b>                                                                                                                                                                                               |    |    |   |
| 104 | Standard square fabric mesh Ref 193 with nominal 6,3mm thick wires and 200 x 200mm pitch complying with SANS 1024/2006 requirements                                                                                            | m2 | 11 |   |
|     | <b><u>PLUMBING &amp; DRAINAGE (PROVISIONAL)</u></b>                                                                                                                                                                            |    |    |   |
|     | <b><u>uPVC pipes</u></b>                                                                                                                                                                                                       |    |    |   |
| 105 | 300mm uPVC Gulley not exceeding 500mm deep, including 300 x 300mm steel light duty square dished grating and frame set in concrete                                                                                             | No | 5  |   |
| 106 | 100 x 50 x 11mm mild steel hot dipped galvanised formed channel of overall 3500mm girth, mitred at two corners and welded together, including welding to two mildsteel hot dipped galvanised plates cast into concrete footing | No | 5  |   |
| 107 | 20mm Galvanised steel water pipes with screwed and sockets joints                                                                                                                                                              | m  | 5  |   |
| 108 | Extra over galvanised steel pipes for 90 degree bend                                                                                                                                                                           | No | 5  |   |
| 109 | 20mm Cast iron brass in-line strainer                                                                                                                                                                                          | No | 5  |   |
| 110 | 20mm Cast iron brass fullway gate valve                                                                                                                                                                                        | No | 5  |   |
| 111 | 20mm Hose bib-tap with lockshield and loose key with 20mm hose union                                                                                                                                                           | No | 5  |   |
| 112 | 20mm 111-20CP pillar tap                                                                                                                                                                                                       | No | 15 |   |
|     | <b>Carried Forward</b>                                                                                                                                                                                                         |    |    | R |
|     | Section No. 3                                                                                                                                                                                                                  |    |    |   |
|     | Bill No. 1                                                                                                                                                                                                                     |    |    |   |
|     | EXTERNAL WORKS                                                                                                                                                                                                                 |    |    |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                      |                                                                                                                                                                                                                                                                                                    |          |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b><u>WATER RETICULATION</u></b>                                                                                                     |                                                                                                                                                                                                                                                                                                    |          |
| <b><u>EARTHWORKS</u></b>                                                                                                             |                                                                                                                                                                                                                                                                                                    |          |
| <b><u>Excavation in earth other than bulk not exceeding 2m deep</u></b>                                                              |                                                                                                                                                                                                                                                                                                    |          |
| 113                                                                                                                                  | Excavation in earth not exceeding 2m deep for pipe trenches                                                                                                                                                                                                                                        | m3 907   |
| <b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 85% Mod AASHTO density</u></b> |                                                                                                                                                                                                                                                                                                    |          |
| 114                                                                                                                                  | Backfilling to pipe trenches compacted to 95% Mod AASHTO density                                                                                                                                                                                                                                   | m3 726   |
| 115                                                                                                                                  | Selected granular filling in bedding under and filling around pipes                                                                                                                                                                                                                                | m3 1 451 |
| <b><u>PN10 Marley Megatuff HDPE pipe system or similar with electro fusion couplings for every joint</u></b>                         |                                                                                                                                                                                                                                                                                                    |          |
| 116                                                                                                                                  | 75mm Pipes laid in trenches not exceeding 2m deep                                                                                                                                                                                                                                                  | m 629    |
| <b><u>Extra over HDPE pipes for fittings</u></b>                                                                                     |                                                                                                                                                                                                                                                                                                    |          |
| 117                                                                                                                                  | 75mm Fittings                                                                                                                                                                                                                                                                                      | No 91    |
| <b><u>Sundries</u></b>                                                                                                               |                                                                                                                                                                                                                                                                                                    |          |
| 118                                                                                                                                  | Unreinforced concrete in thrust blocks in trenches at bends, tees, etc including extra excavation, formwork, etc                                                                                                                                                                                   | m3 1     |
| 119                                                                                                                                  | Cast iron valve box or similar of SABS Type 3B, with 160mm diameter uPVC pipe and non-rising spindle of left-hand closing, capped top to SABS 664 including 20MPa 400 x 400 x 300mm deep pre-cast concrete block with 10MPa 400 x 400 x 200mm concrete base with ground filling properly compacted | No 2     |
| <b><u>Testing</u></b>                                                                                                                |                                                                                                                                                                                                                                                                                                    |          |
| 120                                                                                                                                  | Testing water pipe system                                                                                                                                                                                                                                                                          | Item     |

## **SEWER NETWORK**

Carried Forward

Section No. 3  
Bill No. 1  
EXTERNAL WORKS

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                |                                                                                               |    |     | R |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----|-----|---|
| <b><u>EARTHWORKS</u></b>                                       |                                                                                               |    |     |   |
| 121                                                            | Backfilling to pipe trenches compacted to 95% Mod AASHTO density                              | m3 | 444 |   |
| 122                                                            | Selected granular filling in bedding under and filling around pipes                           | m3 | 273 |   |
| <b><u>Heavy duty (Class 34) uPVC sewer and drain pipes</u></b> |                                                                                               |    |     |   |
| 123                                                            | 110mm Pipes laid in and including trenches not exceeding 1m deep                              | m  | 161 |   |
| 124                                                            | 110mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep        | m  | 138 |   |
| 125                                                            | 110mm Pipes laid in and including trenches exceeding 2m deep and not exceeding 3m deep        | m  | 86  |   |
| 126                                                            | 110mm Pipes laid in and including trenches exceeding 3m deep and not exceeding 4m deep        | m  | 49  |   |
| 127                                                            | 110mm Pipes laid in and including trenches exceeding 4m deep and not exceeding 5m deep        | m  | 22  |   |
| 128                                                            | 160mm Pipes laid in and including trenches not exceeding 1m deep                              | m  | 12  |   |
| 129                                                            | 160mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep        | m  | 310 |   |
| 130                                                            | 160mm Pipes laid in and including trenches exceeding 2m deep and not exceeding 3m deep        | m  | 92  |   |
| 131                                                            | 160mm Pipes laid in and including trenches exceeding 3m deep and not exceeding 4m deep        | m  | 46  |   |
| 132                                                            | 160mm Pipes laid in trenches (trenches elsewhere) exceeding 4m deep and not exceeding 5m deep | m  | 137 |   |
| <b><u>Extra over uPVC for fittings</u></b>                     |                                                                                               |    |     |   |
| 133                                                            | 110mm Pipe fittings                                                                           | No | 63  |   |
| 134                                                            | 160mm Pipe fittings                                                                           | No | 58  |   |
| <b>Carried Forward</b>                                         |                                                                                               |    |     | R |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                  |                                                                                               |    |     |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |      | R |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|---|
|                 | <u>Construct sewer manhole complete from a single length HDPe (minimum 8kN/m2 ring stiffness) manhole pipe shaft of 1000mm diameter comprising excavation in all materials; preparation of formation; 25MPa/19mm cast in-situ concrete base slab; supply, installation and jointing of precast concrete manhole rings to required depth; junction of concrete ring beam to pipe; factory-manufactured HDPe channel and benching units complete with smooth finished surfaces, formed to suit incoming and outgoing pipe diameters and gradients; factory-fitted HDPe steps at 300mm vertical centres; cutting of pipe openings and making good with 10MPa/13mm concrete backfilling around manhole compacted to 93% Mod AASHTO density in 150mm layers using approved material; poly-sulphide seal or cement slurry bedding where required; adaptor slab; heavy-duty precast concrete manhole cover and frame (SABS 558/SANS 555) including concrete coverslab; finishing to paving or surrounding surface complete; all in accordance with drawings, specifications and Engineer's instructions</u> |    |      |   |
| 135             | Manhole 0m to 1m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | 1    |   |
| 136             | Manhole 0m to 1.5m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No | 5    |   |
| 137             | Manhole 0m to 2m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | 2    |   |
| 138             | Manhole 0m to 2.5m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No | 3    |   |
| 139             | Manhole 0m to 3m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | 1    |   |
| 140             | Manhole 0m to 3.5m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No | 1    |   |
| 141             | Manhole 0m to 4m deep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | 1    |   |
|                 | <b><u>Testing</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |      |   |
| 142             | Testing soil drainage system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    | Item |   |
|                 | <b><u>SEWER TREATMENT PLANT</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |      |   |
|                 | <b><u>EARTHWORKS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |      |   |
|                 | Carried Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |      | R |
|                 | Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |      |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                       |                                                                                                                               |    | R    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----|------|
| <b><u>Site clearance</u></b>                                                                                                                          |                                                                                                                               |    |      |
| 143                                                                                                                                                   | Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth            | m2 | 135  |
| 144                                                                                                                                                   | Stripping average 150mm thick layer of top soil and depositing material in prescribed stock piles on site                     | m2 | 135  |
| <b><u>Excavation in earth other than bulk not exceeding 2m deep</u></b>                                                                               |                                                                                                                               |    |      |
| 145                                                                                                                                                   | Trenches                                                                                                                      | m3 | 4    |
| <b><u>Extra over trench and hole excavations in earth other than bulk for excavation in:</u></b>                                                      |                                                                                                                               |    |      |
| 146                                                                                                                                                   | Soft Rock                                                                                                                     | m3 | 1    |
| 147                                                                                                                                                   | Hard Rock                                                                                                                     | m3 | 1    |
| <b><u>Extra over all excavations for carting away</u></b>                                                                                             |                                                                                                                               |    |      |
| 148                                                                                                                                                   | Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor               | m3 | 4    |
| <b><u>Risk of collapse of excavations</u></b>                                                                                                         |                                                                                                                               |    |      |
| 149                                                                                                                                                   | Sides of trench and hole excavations not exceeding 1,5m deep                                                                  | m2 | 4    |
| <b><u>Keeping excavations free of water</u></b>                                                                                                       |                                                                                                                               |    |      |
| 150                                                                                                                                                   | Keeping excavations free of all water other than subterranean water                                                           |    | Item |
| <b><u>G7 or approved material filling supplied by the contractor, compacted to 95% Mod AASHTO density dry density at optimum moisture density</u></b> |                                                                                                                               |    |      |
| 151                                                                                                                                                   | Under floors, steps, pavings, etc                                                                                             | m3 | 17   |
| <b><u>Soil insecticide in accordance with SANS 5859</u></b>                                                                                           |                                                                                                                               |    |      |
| 152                                                                                                                                                   | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 23   |
| 153                                                                                                                                                   | To bottoms and sides of trenches etc                                                                                          | m2 | 4    |
| Carried Forward                                                                                                                                       |                                                                                                                               |    | R    |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                                         |                                                                                                                               |    |      |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                          |                                                                                                                                                                                                                       |    |      | R |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|---|
| <b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>                                                                                       |                                                                                                                                                                                                                       |    |      |   |
| <b><u>25MPa/19mm reinforced concrete cast against excavated surfaces</u></b>                                                             |                                                                                                                                                                                                                       |    |      |   |
| 154                                                                                                                                      | Slabs including beams and inverted beams                                                                                                                                                                              | m3 | 28   |   |
| <b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>                                                                |                                                                                                                                                                                                                       |    |      |   |
| 155                                                                                                                                      | Surface beds, slabs, etc.                                                                                                                                                                                             | m2 | 113  |   |
| <b><u>Test Cubes</u></b>                                                                                                                 |                                                                                                                                                                                                                       |    |      |   |
| 156                                                                                                                                      | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)                                                                                                                                        | No | 2    |   |
| <b><u>Grooves, channels, mortices, sinkings, etc in concrete including sealant</u></b>                                                   |                                                                                                                                                                                                                       |    |      |   |
| 157                                                                                                                                      | 20 x 20mm Grooves in top                                                                                                                                                                                              | m  | 35   |   |
| <b><u>Rough formwork to sides</u></b>                                                                                                    |                                                                                                                                                                                                                       |    |      |   |
| 158                                                                                                                                      | Edges, risers, ends and reveals not exceeding 300mm high or wide                                                                                                                                                      | m  | 22   |   |
| <b><u>Mild steel reinforcement to structural concrete work</u></b>                                                                       |                                                                                                                                                                                                                       |    |      |   |
| 159                                                                                                                                      | Various diameter bars                                                                                                                                                                                                 | t  | 3,75 |   |
| <b><u>High tensile steel dowel bars</u></b>                                                                                              |                                                                                                                                                                                                                       |    |      |   |
| 160                                                                                                                                      | 16mm Diameter dowel bar 350mm long with one end embedded 175mm deep in side of concrete at expansion joint and other end greased with Bond breaker and wrapped in polythene sheeting, including hole through formwork | No | 69   |   |
| <b><u>ROOF COVERINGS</u></b>                                                                                                             |                                                                                                                                                                                                                       |    |      |   |
| <b><u>PALRUF 0100 Industrial corrugated PVC sheeting fixed to steel purlins all in accordance with manufacturer's specifications</u></b> |                                                                                                                                                                                                                       |    |      |   |
| 161                                                                                                                                      | Roof covering with pitches not exceeding 25 degrees                                                                                                                                                                   | m2 | 98   |   |
| Carried Forward                                                                                                                          |                                                                                                                                                                                                                       |    |      | R |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                            |                                                                                                                                                                                                                       |    |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                        |                                                                                                                   |    |      |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----|------|
| 162                                                                                                                                    | Extra roof covering for turbine ventilator opening of 500 x 500mm size                                            | No | 3    |
| 163                                                                                                                                    | Side cladding                                                                                                     | m2 | 145  |
| <b><u>STRUCTURAL STEELWORK</u></b>                                                                                                     |                                                                                                                   |    |      |
| <b><u>COLUMNS, BEAMS, ETC</u></b>                                                                                                      |                                                                                                                   |    |      |
| <b><u>Welded and bolted connection column and beam roof construction</u></b>                                                           |                                                                                                                   |    |      |
| 164                                                                                                                                    | 305 x 165 x 54mm (54kg/m) I section columns                                                                       | t  | 1,95 |
| 165                                                                                                                                    | 203 x 133 x 25mm (25kg/m) I section beam                                                                          | t  | 0,53 |
| <b><u>STEEL PORTAL FRAMES</u></b>                                                                                                      |                                                                                                                   |    |      |
| <b><u>Welded portal frames with flat bearer, gusset and connection plates, bolts, angle cleats etc bolted to concrete or steel</u></b> |                                                                                                                   |    |      |
| 166                                                                                                                                    | Double pitched portal frames 15,5m wide x 2,292m high extreme of 305 x 165 x 46mm 46.1kg/m I-section rafters beam | t  | 5,15 |
| 167                                                                                                                                    | Extra over rafter beam for haunch cut beam section of 500 x 200mm high                                            | No | 12   |
| 168                                                                                                                                    | Extra over rafter beam for haunch cut beam section of 750 x 200mm high                                            | No | 12   |
| <b><u>PURLINS, GIRTS, BRACING, ETC</u></b>                                                                                             |                                                                                                                   |    |      |
| <b><u>Purlins and girts bolted to steel</u></b>                                                                                        |                                                                                                                   |    |      |
| 169                                                                                                                                    | 100 x 75 x 20 x 2.5mm Cold framed lipped channel (5.79kg/m)                                                       | t  | 3,16 |
| <b><u>Steel plates, welded on both sides</u></b>                                                                                       |                                                                                                                   |    |      |
| 170                                                                                                                                    | 303 x 150mm x 10mm Thick plate with 4no holes of 18mm diameter each                                               | No | 6    |
| 171                                                                                                                                    | 332 x 172 x 16mm Thick plate with 4no holes of 18mm diameter each                                                 | No | 2    |
| 172                                                                                                                                    | 538 x 167 x 10mm Thick plate with 12no of 22mm diameter each                                                      | No | 2    |
| <b>Carried Forward</b>                                                                                                                 |                                                                                                                   |    |      |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                          |                                                                                                                   |    |      |

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## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     |                                                                                                                                                                                        |    |       |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|     | Brought Forward                                                                                                                                                                        |    | R     |
| 173 | 597 x 178 x 10mm Thick plate with 4no holes of 22mm diameter each                                                                                                                      | No | 3     |
|     | <b><u>Bolts to columns, beams, etc</u></b>                                                                                                                                             |    |       |
| 174 | M16 Bolts (Grade 4.8)                                                                                                                                                                  | No | 30    |
| 175 | M20 bolts(Grade 4.8)                                                                                                                                                                   | No | 30    |
|     | <b><u>400 wide x 4mm thick APEX Exclusive Balledge strip curtains installed using stainless steel brackets (Colour: TBC), all in accordance with manufacturer's specifications</u></b> |    |       |
| 176 | Size 4220 x 3000mm high                                                                                                                                                                | No | 1     |
|     | <b><u>ROADWORK, PARKING AREAS AND PAVING</u></b>                                                                                                                                       |    |       |
|     | <b><u>Site clearance</u></b>                                                                                                                                                           |    |       |
| 177 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth                                                                     | m2 | 3 611 |
|     | <b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>                                                                                                                                 |    |       |
|     | <b><u>Excavation in earth not exceeding 2m deep</u></b>                                                                                                                                |    |       |
| 178 | Over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site                                                                       | m3 | 1 914 |
|     | <b><u>Extra over bulk excavation in earth for excavation in</u></b>                                                                                                                    |    |       |
| 179 | Soft rock                                                                                                                                                                              | m3 | 134   |
| 180 | Hard rock                                                                                                                                                                              | m3 | 96    |
|     | <b><u>CARTING AWAY</u></b>                                                                                                                                                             |    |       |
|     | <b><u>Extra over all excavations for carting away</u></b>                                                                                                                              |    |       |
| 181 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor                                                                         | m3 | 1 914 |
|     | <b><u>KEEPING EXCAVATIONS FROM WATER</u></b>                                                                                                                                           |    |       |
|     | Carried Forward                                                                                                                                                                        |    | R     |
|     | Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                                                                                                                          |    |       |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                           |                                                                                                                                                                                                                |      | R     |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| <b><u>Keeping excavations free of water</u></b>                                           |                                                                                                                                                                                                                |      |       |
| 182                                                                                       | Keeping excavations free of water other than subterranean water                                                                                                                                                | Item |       |
| <b><u>COMPACTION</u></b>                                                                  |                                                                                                                                                                                                                |      |       |
| <b><u>Earth filling supplied by the contractor under parking areas, roadways, etc</u></b> |                                                                                                                                                                                                                |      |       |
| 183                                                                                       | Filling of approved cohesion-less material in accordance with SABS 1200 DM, compacted to 95% Mod AASHTO density                                                                                                | m3   | 72    |
| 184                                                                                       | Base course of imported C4 material in accordance with SABS 1200 ME, stabilised to attain UCS>1,0 MPa after seven days and compacted to 95% Mod AASHTO density                                                 | m3   | 452   |
| 185                                                                                       | Base course of imported G5 material in accordance with SABS 1200 ME, stabilised to attain UCS>1.0 Mpa after seven days and compacted to 95% Mod AASHTO density                                                 | m3   | 89    |
| 186                                                                                       | Sub-base course of imported G5 material in accordance with SABS 1200 DM, compacted to 95% Mod AASHTO density                                                                                                   | m3   | 452   |
| 187                                                                                       | Sub-base course of imported G7 material in accordance with SABS 1200 DM, compacted to 95% Mod AASHTO density                                                                                                   | m3   | 89    |
| 188                                                                                       | Upper selected filling of imported G7 material in accordance with SABS 1200 DM, compacted to 95% Mod AASHTO density                                                                                            | m3   | 408   |
| 189                                                                                       | Road bed course in accordance with SABS 1200 ME, compacted to 90% Mod AASHTO density                                                                                                                           | m3   | 950   |
| <b><u>Compaction of surfaces</u></b>                                                      |                                                                                                                                                                                                                |      |       |
| 190                                                                                       | Compaction of ground surfaces under pavings etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density | m2   | 4 560 |
| <b><u>SOIL POISONING</u></b>                                                              |                                                                                                                                                                                                                |      |       |
| Carried Forward                                                                           |                                                                                                                                                                                                                |      | R     |
| Section No. 3<br>Bill No. 1<br>EXTERNAL WORKS                                             |                                                                                                                                                                                                                |      |       |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                                                                                                                                   |    |       | R |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|---|
|     | <u>Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasiem 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m²</u>                                                          |    |       |   |
| 191 | Under paving etc                                                                                                                                                                                                                                                  | m2 | 4 560 |   |
|     | <b><u>TESTS</u></b>                                                                                                                                                                                                                                               |    |       |   |
|     | <b><u>Additional tests required by the engineer</u></b>                                                                                                                                                                                                           |    |       |   |
| 192 | CBR test in accordance with method A8 of TMH1                                                                                                                                                                                                                     | No | 1     |   |
|     | <b><u>REINFORCEMENT CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>                                                                                                                                                                                              |    |       |   |
|     | <b><u>80mm Thick 25MPa precast concrete interlocking block paving of 200x100mm grey paving blocks in accordance with SANS 1058, laid to fall on and including 20mm thick sand layer with joints filled in with sand, compacted with a vibration compactor</u></b> |    |       |   |
| 193 | Paving to parking area etc to 1 degreee                                                                                                                                                                                                                           | m2 | 2 665 |   |
| 194 | Paving to parking areas etc to 3 degree falls                                                                                                                                                                                                                     | m2 | 529   |   |
|     | <b><u>Precast concrete kerbs finished smooth on exposed surfaces, including bedding, jointing and pointing</u></b>                                                                                                                                                |    |       |   |
| 195 | Fig 8C Blitz kerbs with unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc                                                                                                                                             | m  | 782   |   |
|     | <b><u>Paintwork</u></b>                                                                                                                                                                                                                                           |    |       |   |
|     | <b><u>Prepare and apply one coat white reflective road marking paint on precast concrete paving blocks, etc</u></b>                                                                                                                                               |    |       |   |
| 196 | 100mm Wide line                                                                                                                                                                                                                                                   | m  | 207   |   |
| 197 | 100mm Wide dotted line                                                                                                                                                                                                                                            | m  | 207   |   |
|     | <b><u>VENTILATORS</u></b>                                                                                                                                                                                                                                         |    |       |   |
|     | <b><u>VENTILATORS</u></b>                                                                                                                                                                                                                                         |    |       |   |
| 198 | LP600 Vent Turbine Ventilator                                                                                                                                                                                                                                     | No | 10    |   |
|     | <b>Carried to Final Summary</b>                                                                                                                                                                                                                                   |    |       | R |
|     | Section No. 3                                                                                                                                                                                                                                                     |    |       |   |
|     | Bill No. 1                                                                                                                                                                                                                                                        |    |       |   |
|     | EXTERNAL WORKS                                                                                                                                                                                                                                                    |    |       |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                             | Quantity | Rate | Amount |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>SECTION 3</u></b>                                                                                                                                     |          |      |        |
|         | <b><u>BILL 1</u></b>                                                                                                                                        |          |      |        |
|         | <b><u>ELECTRICAL</u></b>                                                                                                                                    |          |      |        |
| 1       | GENERAL COSTS<br>Loading and off loading of material and equipment.                                                                                         | Item     |      |        |
| 2       | Technical submittals                                                                                                                                        | Item     |      |        |
| 3       | Transport                                                                                                                                                   | Item     |      |        |
| 4       | Compliance With Health and Safety Regulations                                                                                                               | Item     |      |        |
| 5       | Development of workshop drawings, according to the specification                                                                                            | Item     |      |        |
| 6       | CADDED "As Installed" drawings, marking up drawings, as specified                                                                                           | Item     |      |        |
| 7       | Testing ,Load bancing and commissioning of complete Works to engineer and client satisfaction.                                                              | Item     |      |        |
| 8       | End User Training                                                                                                                                           | Item     |      |        |
| 9       | Inspection and handing over of fully operational electrical and electronic installation.                                                                    | Item     |      |        |
| 10      | Compilation of detail operational manuals and maintenance Manuals(with all test results), according to engineer's specification(3 sets) and 1 memeory stick | Item     |      |        |
| 11      | Marking and labeling of all cabling for all equipment installed                                                                                             | Item     |      |        |
| 12      | Comprehensive 12 months Maintenance after practical completion                                                                                              | Item     |      |        |
| 13      | Complete on-site secured electrical equipment storage facility, as specified                                                                                | Item     |      |        |
| 14      | Submission certificate of compliances                                                                                                                       | Item     |      |        |
| 15      | PSUM<br>Soccer field irrigation equipment                                                                                                                   | Item     |      |        |
| 16      | Multi Purpose Hall PA system                                                                                                                                | Item     |      |        |
|         | <b>Carried Forward</b>                                                                                                                                      |          | R    |        |
|         | Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                                   |          |      |        |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                   |                                                                                   |      | R |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|---|
| <b><u>ELECTRICAL DISTRIBUTION BOARD</u></b>                                                                                                                                                                                                                                                       |                                                                                   |      |   |
| <b><u>Supply, Installation and commissioning of the specified Distribution Boards, including making off all wire connections and circuit breakers included (external wiring, conduit, armoured cable and terminations given</u></b>                                                               |                                                                                   |      |   |
| 17                                                                                                                                                                                                                                                                                                | SINGLE BLOCKS<br>Guard House DB                                                   | Item |   |
| 18                                                                                                                                                                                                                                                                                                | Multi Purpose Hall DB                                                             | Item |   |
| 19                                                                                                                                                                                                                                                                                                | Cafeteria DB                                                                      | Item |   |
| <b><u>ELECTRICAL DISTRIBUTION BOARDS</u></b>                                                                                                                                                                                                                                                      |                                                                                   |      |   |
| <b><u>Supply, Installation and commissioning of the specified Distribution Boards, including making off all wire connections and circuit breakers included (external wiring, conduit, armoured cable and terminations given elsewhere) as per the Distribution drawings and listed below.</u></b> |                                                                                   |      |   |
| 20                                                                                                                                                                                                                                                                                                | board as indicated or instructed by Engineer.<br>350A triple pole circuit breaker | No 1 |   |
| 21                                                                                                                                                                                                                                                                                                | 300A triple pole circuit breaker                                                  | No 1 |   |
| 22                                                                                                                                                                                                                                                                                                | 250A triple pole circuit breaker                                                  | No 1 |   |
| 23                                                                                                                                                                                                                                                                                                | 80A triple pole circuit breaker, 5kA                                              | No 1 |   |
| 24                                                                                                                                                                                                                                                                                                | 60A Tripple pole circuit breaker, 5kA                                             | No 1 |   |
| 25                                                                                                                                                                                                                                                                                                | 60A double pole circuit breaker, 5kA                                              | No 1 |   |
| 26                                                                                                                                                                                                                                                                                                | 63A double pole earthleakage unit, 5kA                                            | No 1 |   |
| 27                                                                                                                                                                                                                                                                                                | 50A double pole circuit breaker, 5kA                                              | No 1 |   |
| 28                                                                                                                                                                                                                                                                                                | 40A double pole circuit breaker, 5kA                                              | No 1 |   |
| 29                                                                                                                                                                                                                                                                                                | 30A double pole circuit breaker, 5kA                                              | No 1 |   |
| <b>Carried Forward</b>                                                                                                                                                                                                                                                                            |                                                                                   |      | R |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                                                                                                                                                                         |                                                                                   |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                |    | R   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| 30                                                                                                                                                                                                                                                                                                                                                                                                                                             | 30A single pole circuit breaker, 5kA                                                                                                           | No | 1   |
| 31                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20A Single pole circuit breaker, 5kA                                                                                                           | No | 1   |
| 32                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20A Double pole circuit breaker, 5kA                                                                                                           | No | 1   |
| 33                                                                                                                                                                                                                                                                                                                                                                                                                                             | 10A single pole circuit breaker, 5kA                                                                                                           | No | 1   |
| <b><u>FEEDER CABLES</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                |    |     |
| <u>Supply, install and connect 660/1000 Volt multi-core PVC insulated copper, armoured cables: connection of conductors, cable lugs, captive glands shrouds, cable management labeling, and handing fully compliant and operational 660/1000V multi-core PC insulated, armoured feeder cables in accordance with SANS 10142-1 ; SANS 1507, SANS 10119: 2004, SANS 10313, SANS 62305-1-2-3-4 as revised, SANS10400, municipality electrical</u> |                                                                                                                                                |    |     |
| <b><u>GUARD HOUSE</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                |    |     |
| 34                                                                                                                                                                                                                                                                                                                                                                                                                                             | Complete 6mm <sup>2</sup> x 3 core cable - in ducts, trenches or on cable tray, as specified                                                   | m  | 110 |
| 35                                                                                                                                                                                                                                                                                                                                                                                                                                             | Complete 6mm <sup>2</sup> x 2 core electrical Cable ends                                                                                       | No | 5   |
| 36                                                                                                                                                                                                                                                                                                                                                                                                                                             | Complete 4mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified | m  | 110 |
| <b><u>MULTI PURPOSE HALL</u></b>                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                |    |     |
| 37                                                                                                                                                                                                                                                                                                                                                                                                                                             | Complete 25mm <sup>2</sup> x 4 core cable - in ducts, trenches or on cable tray, as specified                                                  | m  | 95  |
| 38                                                                                                                                                                                                                                                                                                                                                                                                                                             | Complete 25mm <sup>2</sup> x 4 core electrical Cable ends                                                                                      | No | 5   |
| 39                                                                                                                                                                                                                                                                                                                                                                                                                                             | Complete 16mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable, as specified.   | m  | 95  |
| Carried Forward                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                |    | R   |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                |    |     |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                           |                                                                                                                                                 |    | R   |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| <b><u>CAFETERIA BLOCK</u></b>             |                                                                                                                                                 |    |     |
| 40                                        | Complete 50mm <sup>2</sup> x 4 core cable - in ducts, trenches or on cable tray, as specified                                                   | m  | 95  |
| 41                                        | Complete 50mm <sup>2</sup> x 4 core electrical Cable ends                                                                                       | No | 2   |
| 42                                        | Complete 35mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified | m  | 95  |
| <b><u>CABLES</u></b>                      |                                                                                                                                                 |    |     |
| 43                                        | Complete 6mm <sup>2</sup> x 3 core cable - in ducts, trenches or on cable tray, as specified                                                    | m  | 65  |
| 44                                        | Complete 6mm <sup>2</sup> x 2 core cable - in ducts, trenches or on cable tray, as specified                                                    | m  | 104 |
| 45                                        | Complete 4mm <sup>2</sup> x 2 core cable - in ducts, trenches or on cable tray, as specified                                                    | m  | 100 |
| 46                                        | Complete 4mm <sup>2</sup> x 3 core cable - in ducts, trenches or on cable tray, as specified                                                    | m  | 85  |
| 47                                        | Complete 2.5mm <sup>2</sup> x 2 core cable - in ducts, trenches or on cable tray, as specified                                                  | m  | 370 |
| 48                                        | Complete 2.5mm <sup>2</sup> x 3 core cable - in ducts, trenches or on cable tray, as specified                                                  | m  | 20  |
| 49                                        | Complete 25mm <sup>2</sup> x 3 core electrical cable ends                                                                                       | No | 4   |
| 50                                        | Complete 16mm <sup>2</sup> x 3 core electrical cable ends                                                                                       | No | 9   |
| 51                                        | Complete 6mm <sup>2</sup> x 3 core electrical cable ends                                                                                        | No | 7   |
| 52                                        | Complete 6mm <sup>2</sup> x 2 core electrical cable ends                                                                                        | No | 7   |
| 53                                        | ends                                                                                                                                            | No | 7   |
| 54                                        | Complete 4mm <sup>2</sup> x 2core electrical Cable ends                                                                                         | No | 9   |
| 55                                        | Complete 2.5mm <sup>2</sup> x 2 core electrical Cable ends                                                                                      | No | 23  |
| 56                                        | Complete 2,5mm <sup>2</sup> x 3core electrical cable ends                                                                                       | No | 3   |
| Carried Forward                           |                                                                                                                                                 |    | R   |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL |                                                                                                                                                 |    |     |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                                   |    |     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
|    | <b>Brought Forward</b>                                                                                                                                                                                            |    | R   |
| 57 | Complete 16mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified                                                                   | m  | 80  |
| 58 | Complete 10mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified                                                                   | m  | 90  |
| 59 | Complete 4mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified                                                                    | m  | 171 |
| 60 | Complete 2.5mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified                                                                  | m  | 65  |
| 61 | Complete 1.5mm <sup>2</sup> Bare cu Earthwire run in parallel with above cables including the terminations either end of cable run, as specified                                                                  | m  | 75  |
|    | <b><u>WIRING CHANNEL INSTALLATION</u></b>                                                                                                                                                                         |    |     |
|    | <b><u>Supply, delivery and Installation of Galvanized Wiring Channel as specified , including hangers, threaded rods, locknuts and metal covers.Complete P8000 galvanized Wiring</u></b>                          |    |     |
| 62 | Channel with metal covers, as specified                                                                                                                                                                           | m  | 56  |
|    | <b><u>LUMINAIRES</u></b>                                                                                                                                                                                          |    |     |
|    | <b><u>Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. (all light fittings samples shall be approved by the electrical engineer prior to placing orders).</u></b> |    |     |
|    | <b><u>GUARD HOUSE</u></b>                                                                                                                                                                                         |    |     |
| 63 | Type B1: Complete Decorative Ceiling mounted IP65 rated interior bulkhead complete with 22W LED lamp, control gear,similar or equal and approved.                                                                 | No | 3   |
|    | <b>Carried Forward</b>                                                                                                                                                                                            |    | R   |
|    | Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                                                                                         |    |     |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                                                                                                         |    | R  |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| 64 | Type B3: Complete Wall mounted IP65 rated exterior bulkhead complete with 22W LED lamp, control gear, similar or equal and approved. Black Trim.        | No | 4  |
| 65 | Type F2: Complete 1200mm 2 lamp 2x28W Double open channel luminaire with LED energy saving lamps. MULTI PURPOSE HALL                                    | No | 2  |
| 66 | Type F1: Complete 1200mm 1 lamp 1x28W open channel luminaire with LED energy saving lamps.                                                              | No | 3  |
| 67 | Type F2: Complete 1200mm 2 lamp 2x28W Double open channel luminaire with LED energy saving lamps.                                                       | No | 6  |
| 68 | Type F3-1: Complete 1200x600mm surfaced mounted decorative LED luminaire with 4 x 28W lamps and low brightness diffuser                                 | No | 5  |
| 69 | Type F3: Complete 1200x600mm recessed decorative LED luminaire with 4 x 28W lamps and low brightness diffuser                                           | No | 27 |
| 70 | Type B2: Complete Ceiling mounted IP65 rated interior bulkhead complete with 22W LED lamp with wire guard, control gear, similar or equal and approved. | No | 9  |
| 71 | Type B3: Complete Wall mounted IP65 rated exterior bulkhead complete with 22W LED lamp, control gear, similar or equal and approved. Black Trim.        | No | 16 |
| 72 | Type B4-1: Complete high bay 400W LED lamp, control gear, similar or equal and approved to BekaBay                                                      | No | 20 |
| 73 | Type D1: Complete 14 W LED 190 Diameter down lighter with glass                                                                                         | No | 5  |
| 74 | TYPE E1: Complete wall mounted LED exit luminaire complete with LED lamps, control gear, similar and equal and approved:                                | No | 9  |
| 75 | Type B4 50w LED Flood lights                                                                                                                            | No | 12 |
|    | <b><u>CAFETERIA BLOCK</u></b>                                                                                                                           |    |    |
| 76 | Type F2: Complete 1200mm 2 lamp 2x28W Double open channel luminaire with LED energy saving lamps.                                                       | No | 31 |
|    | Carried Forward                                                                                                                                         |    | R  |
|    | Section No. 4                                                                                                                                           |    |    |
|    | Bill No. 1                                                                                                                                              |    |    |
|    | ELECTRICAL                                                                                                                                              |    |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                                                                                                         |    |       | R |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|---|
| 77 | Type F2-1: Complete 1200mm 2 lamp 2x28W Double open channel luminaire with LED energy saving lamps flamen retardant poly carbonate diffuser.            | No | 2     |   |
| 78 | Type B3: Complete Wall mounted IP65 rated exterior bulkhead complete with 22W LED lamp, control gear, similar or equal and approved. Black Trim.        | No | 6     |   |
| 79 | Type B2: Complete Ceiling mounted IP65 rated interior bulkhead complete with 22W LED lamp with wire guard, control gear, similar or equal and approved. | No | 3     |   |
|    | <b><u>TRENCHING</u></b>                                                                                                                                 |    |       |   |
|    | <b><u>Supply and installation of cable sleeves as specified,in trenches or cast in concrete.excluding trenching or backfilling</u></b>                  |    |       |   |
| 80 | Complete 600mm deep x 450mm wide,soft excavation                                                                                                        | m  | 100   |   |
| 81 | Complete 600mm deep x 450mm wide,intermediate excavation                                                                                                | m  | 100   |   |
| 82 | Complete 600mm deep x 450mm wide,Careful excavation                                                                                                     | m  | 100   |   |
|    | <b><u>CABLE SLEEVES</u></b>                                                                                                                             |    |       |   |
|    | <b><u>specified, in trenches or cast in concrete, excluding trenching or backfilling</u></b>                                                            |    |       |   |
| 83 | Complete 110mm Ø Cable Sleeve                                                                                                                           | m  | 100   |   |
| 84 | Complete 50mm Ø Cable Sleeve                                                                                                                            | m  | 100   |   |
|    | <b><u>CONDUCTORS</u></b>                                                                                                                                |    |       |   |
|    | <b><u>Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits,cable trays, trunking and</u></b>                    |    |       |   |
| 85 | 4mm² PVC Twin & Earth cable, including terminations                                                                                                     | m  | 9 500 |   |
|    | <b>Carried Forward</b>                                                                                                                                  |    |       | R |
|    | Section No. 4                                                                                                                                           |    |       |   |
|    | Bill No. 1                                                                                                                                              |    |       |   |
|    | ELECTRICAL                                                                                                                                              |    |       |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                |                                                                                           |    |        |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----|--------|
| 86                                                                                                                                             | 2.5mm <sup>2</sup> PVC Twin & Earth cable, including terminations                         | m  | 13 380 |
| <b><u>CONDUIT</u></b>                                                                                                                          |                                                                                           |    |        |
| <b><u>cutting,threading, bending, reaming, short lengths,1- /2-/3-4-way boxes, bushes, Installed on surface in ceiling space:</u></b>          |                                                                                           |    |        |
| 87                                                                                                                                             | 20mm PVC                                                                                  | m  | 1 500  |
| 88                                                                                                                                             | 25mm PVC                                                                                  | m  | 1 500  |
| <b><u>Chased into brickwork:</u></b>                                                                                                           |                                                                                           |    |        |
| 89                                                                                                                                             | 20mm PVC                                                                                  | m  | 1 500  |
| 90                                                                                                                                             | 25mm PVC                                                                                  | m  | 2 000  |
| 91                                                                                                                                             | 32mm PVC                                                                                  | m  | 1 200  |
| <b><u>Supply and installation of 60mm Dia round 1-4 way ceiling boxes including</u></b>                                                        |                                                                                           |    |        |
| 92                                                                                                                                             | 20mm PVC                                                                                  | No | 400    |
| 93                                                                                                                                             | 25mm PVC                                                                                  | No | 350    |
| 94                                                                                                                                             | Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves: | m  | 6 000  |
| <b><u>Supply and installation of galvanised pressed boxes flush in wall, including bushes, locknuts and box extensions where required:</u></b> |                                                                                           |    |        |
| 95                                                                                                                                             | Complete 100x100x50mm outlet box complete with cover lid, as specified                    | No | 70     |
| <b><u>LIGHT SWITCHES</u></b>                                                                                                                   |                                                                                           |    |        |
| Carried Forward                                                                                                                                |                                                                                           |    |        |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                      |                                                                                           |    |        |

R

R

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                              |                                                                                                                      |    | R   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----|-----|
| <b><u>Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates</u></b>                                                              |                                                                                                                      |    |     |
| 96                                                                                                                                                                                                                                                           | Complete 16A 1-lever / 1-way on 100x50x50mm, as specified                                                            | No | 28  |
| 97                                                                                                                                                                                                                                                           | Complete 16A 1-lever / 2-way on 100x50x50mm, as specified                                                            | No | 6   |
| 98                                                                                                                                                                                                                                                           | Complete 16A 2-lever / 1-way on 100x50x50mm, as specified                                                            | No | 5   |
| 99                                                                                                                                                                                                                                                           | Complete Motion ensor light switch                                                                                   | No | 5   |
| 100                                                                                                                                                                                                                                                          | Complete Photo Cell Switch                                                                                           | No | 2   |
| <b><u>POWER SOCKET OUTLETS</u></b>                                                                                                                                                                                                                           |                                                                                                                      |    |     |
| <b><u>Supply, fitting and electrical connection of flush or surface mounted switched or un-switched socket in either 100 x 100, x 50, round box or wiring channel, excluding box (for flush type) and conduit connections, but including cover plate</u></b> |                                                                                                                      |    |     |
| 101                                                                                                                                                                                                                                                          | Complete 16A switched socket outlet in accodance with SANS 164-1 and SANS 164-2 on 100x100x50mm outlet as specified. | No | 28  |
| 102                                                                                                                                                                                                                                                          | Complete 16A single switched socket on 100x100x50mm outlet                                                           | No | 20  |
| 103                                                                                                                                                                                                                                                          | Complete 16A double switched socket on 100x100x50mm outlet                                                           | No | 8   |
| 104                                                                                                                                                                                                                                                          | Complete Multi power box in Staff Room                                                                               | No | 5   |
| 105                                                                                                                                                                                                                                                          | Complete 5A un-switched socket on 60mm Diameter Round outlet                                                         | No | 250 |
| <b><u>ISOLATORS</u></b>                                                                                                                                                                                                                                      |                                                                                                                      |    |     |
| Carried Forward                                                                                                                                                                                                                                              |                                                                                                                      |    | R   |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                                                                                                                                    |                                                                                                                      |    |     |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                             |                                                                                               |    | R  |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----|----|
| <b><u>Supply and install isolator in wall box complete with cover plate.</u></b>                                            |                                                                                               |    |    |
| 106                                                                                                                         | Complete 30A 3-pole surfaced mount Isolators for AC units , as specified                      | No | 6  |
| 107                                                                                                                         | Complete 30A 2-pole surfaced mount Isolators for AC units , as specified                      | No | 2  |
| 108                                                                                                                         | Complete 10A 1-pole surfaced mount Isolators for AC units , as specified                      | No | 10 |
| 109                                                                                                                         | Complete 20A 2-pole surfaced mount Isolators for AC units , as specified                      | No | 6  |
| 110                                                                                                                         | Complete 20A 2-pole surfaced mount Water tight external Isolators for AC units , as specified | No | 6  |
| 111                                                                                                                         | Complete 10A 3-pole surfaced mount Isolators for AC units , as specified                      | No | 4  |
| 112                                                                                                                         | Complete 20A 3-pole surfaced mount Isolators for AC units , as specified                      | No | 4  |
| 113                                                                                                                         | Complete 60A 3-pole surfaced mount Isolators for AC unit , as specified                       | No | 4  |
| <b><u>POWER SKIRTING INSTALLATION</u></b>                                                                                   |                                                                                               |    |    |
| <b><u>Supply and install power skirting including cutting, ends, covers, elbows, T's, short lenghts, screws ect. 2-</u></b> |                                                                                               |    |    |
| 114                                                                                                                         | Compartment as specified.:                                                                    | m  | 20 |
| 115                                                                                                                         | complete white16A single socket outlet                                                        | No | 14 |
| 116                                                                                                                         | Data outlet on powerskirting                                                                  | No | 4  |
| 117                                                                                                                         | dedicated red 16A single socket outlet                                                        | No | 4  |
| 118                                                                                                                         | outlet for fax and printer on powerskirting                                                   | No | 2  |
| 119                                                                                                                         | complete white16A two point pin socket outl                                                   | No | 4  |
| Carried Forward                                                                                                             |                                                                                               |    | R  |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                   |                                                                                               |    |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                    |      | R  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|
| 120                                                                                                                                                                                                                         | Supply and install telephone outlets on power skirting with cradles and telephone sockets.                                                                                                                                                                                                         | No   | 16 |
| 121                                                                                                                                                                                                                         | Supply and install a flush mounted telephone board complete with frame,door,wallbox,fixings including termination of all conduits 450mmx450mmx150mm deep                                                                                                                                           | No   | 3  |
| 122                                                                                                                                                                                                                         | Supply and install a 5Kva fully online UPS complete with by-pass switch and 30min back up time as specified                                                                                                                                                                                        | No   | 4  |
| <b><u>LIGHTNING PROTECTION INSTALLATION</u></b>                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                    |      |    |
| <b><u>Supply, install and test a complete lightning protection installation, including aluminium and copper conductors, test joints, PVC conduit, earth electrodes for the following building but not limited to: -</u></b> |                                                                                                                                                                                                                                                                                                    |      |    |
| 123                                                                                                                                                                                                                         | Whole Buildings, as specified                                                                                                                                                                                                                                                                      | No   | 1  |
| <b><u>EARTHING AND BONDING</u></b>                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                    |      |    |
| 124                                                                                                                                                                                                                         | Earthing of all buildings to comply with the latest SANS 10142 , as revised Code of Practice, as revised for The Wiring of Premises as amended and as specified. Bonding of all hot, cold and waste pipes complete with 12,5mm x 1mm thick solid or perforated copper tape including terminations. | Item |    |
| <b><u>TESTING AND COMMISSIONING</u></b>                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                    |      |    |
| 125                                                                                                                                                                                                                         | Inspections, testing and handing over of the complete installation in the presence of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliance by an accredited person.:                                                                 | Item |    |
| <b><u>INTRUSION ALARM SYSTEM INSTALLATION</u></b>                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                    |      |    |
| Carried Forward                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                    |      | R  |
| Section No. 4<br>Bill No. 1<br>ELECTRICAL                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                    |      |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward          |                                                                                                                               |    | R    |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------|----|------|
|                          | <b><u>Supply &amp; Install the following equipment including all connectors, terminal screws in the following blocks.</u></b> |    |      |
|                          | <b><u>Cafeteria block.</u></b>                                                                                                |    |      |
| 126                      | Complete keypad access control unit, as specified                                                                             | No | 5    |
| 127                      | Complete Intrusion Alarm panel with batter backup , as specified                                                              | No | 5    |
| 128                      | Complete cabling, testing and labeling thereof, as specified                                                                  | m  | 300  |
| 129                      | Complete magnetic door contact, as specified                                                                                  | No | 7    |
| 130                      | Complete magnetic Window contact, as specified                                                                                | No | 38   |
| 131                      | Complete passive infra red motion detector linked to the buglar alarm panel as per specified                                  | No | 11   |
| 132                      | Complete 25W sounders, as specified                                                                                           | No | 2    |
| 133                      | Complete 2 pair multi core cabling, as specified                                                                              | m  | 900  |
|                          | <b><u>BACK UP POWER</u></b>                                                                                                   |    |      |
| 134                      | Allow a PC amount for back up power of R 800 000.00 (Eight Hundred Thousand Rands)                                            |    | Item |
| Carried to Final Summary |                                                                                                                               |    | R    |
| Section No. 4            |                                                                                                                               |    |      |
| Bill No. 1               |                                                                                                                               |    |      |
| ELECTRICAL               |                                                                                                                               |    |      |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                                                                                    | Quantity | Rate | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>SECTION 5</u></b>                                                                                                                            |          |      |        |
|         | <b><u>BILL 1</u></b>                                                                                                                               |          |      |        |
|         | <b><u>MECHANICAL:</u></b>                                                                                                                          |          |      |        |
|         | <b><u>Preliminary and General</u></b>                                                                                                              |          |      |        |
| 1       | Technical Submissions                                                                                                                              | Item     |      |        |
| 2       | Workshop Drawings                                                                                                                                  | Item     |      |        |
| 3       | Scaffolding                                                                                                                                        | Item     |      |        |
| 4       | Transport                                                                                                                                          | Item     |      |        |
| 5       | Rigging and Crainage                                                                                                                               | Item     |      |        |
| 6       | Compliance With Health and Safety Regulations                                                                                                      | Item     |      |        |
| 7       | Attendance and contract management                                                                                                                 | Item     |      |        |
| 8       | Site Establishment                                                                                                                                 | Item     |      |        |
|         | <b><u>Project Engineering Management and Quality Control</u></b>                                                                                   |          |      |        |
| 9       | Testing, balancing, commissioning and handover of air conditioning units and fans including compilation of submitted to the Engineer for approval. | Item     |      |        |
| 10      | Operation and Maintenance Instruction Manuals                                                                                                      | Item     |      |        |
| 11      | User Training                                                                                                                                      | No 1     |      |        |
| 12      | Three Sets of "as built' drawings "including 1 on memory stick"                                                                                    | No 4     |      |        |
| 13      | 12 Months free maintenance                                                                                                                         | Item     |      |        |
| 14      | Any other item neccesary that might have been omitted (allow 5%)                                                                                   | Item     |      |        |
| 15      | P's and G's                                                                                                                                        | Item     |      |        |
|         | <b><u>Bill 5: Guard House</u></b>                                                                                                                  |          |      |        |
|         | <b>Carried Forward</b>                                                                                                                             |          | R    |        |
|         | Section No. 5<br>Bill No. 1<br><b>MECHANICAL</b>                                                                                                   |          |      |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                     |                                                                                                                                                                       |      | R |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|
| <b><u>VENTILATION</u></b><br><b><u>Fresh Air Supply fans</u></b><br><b><u>Install and connect with all necessary fittings and accessories</u></b>                                   |                                                                                                                                                                       |      |   |
| 16                                                                                                                                                                                  | Wall-mounted axial fresh air supply fan c/w 1.5D attenuators before and after and all fittings and collars to connect to duct.                                        | No   | 1 |
| <b><u>Extraction Fans</u></b>                                                                                                                                                       |                                                                                                                                                                       |      |   |
| 17                                                                                                                                                                                  | Wall-Mounted Axial Extraction fan unit with a duty of 50L/s @100Pa                                                                                                    | No   | 1 |
| <b><u>Air Terminals</u></b><br><b><u>Install and connect with all necessary fittings and accessories</u></b>                                                                        |                                                                                                                                                                       |      |   |
| 18                                                                                                                                                                                  | 300X200mm Door Grilles                                                                                                                                                | No   | 3 |
| <b><u>Install and connect with all necessary fittings and accessories</u></b>                                                                                                       |                                                                                                                                                                       |      |   |
| 19                                                                                                                                                                                  | Wall Mounted Split unit with 2.5kW Cooling Capacity and 3.0kW Heating Capacity c/w 1.5D attenuators before and after and all fittings and collars to connect to duct. | No   | 1 |
| <b><u>Refrigerant Piping</u></b><br><b><u>Supply, Deliver and Install the entire refrigeration pipe network to suit the AC units (indoor and outdoor) offered as in drawing</u></b> |                                                                                                                                                                       |      |   |
| 20                                                                                                                                                                                  | 6.35mm dia. Liquid pipe                                                                                                                                               | m    | 3 |
| 21                                                                                                                                                                                  | 12.70mm dia Gas Pipe                                                                                                                                                  | m    | 3 |
| 22                                                                                                                                                                                  | 32mm Outside dia. And 25mm Inside Dia Drain pipe                                                                                                                      | m    | 3 |
| <b><u>Electrical Installations &amp; connections</u></b>                                                                                                                            |                                                                                                                                                                       |      |   |
| 23                                                                                                                                                                                  | Cabling, power supply and all electrical work related to HVAC installation on this project                                                                            | Item |   |
| <b><u>AIR CONDITIONING AND VENTILATION INSTALLATION</u></b>                                                                                                                         |                                                                                                                                                                       |      |   |
| 24                                                                                                                                                                                  | Workshop Drawings                                                                                                                                                     | Item |   |
| Carried Forward                                                                                                                                                                     |                                                                                                                                                                       |      | R |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                           |                                                                                                                                                                       |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                                                                                                                                                       |          | R |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|
| 25 | Scaffolding                                                                                                                                                                                           | Item     |   |
| 26 | Transport                                                                                                                                                                                             | Item     |   |
| 27 | Rigging and Crainage                                                                                                                                                                                  | Item     |   |
| 28 | Compliance With Health and Safety Regulations                                                                                                                                                         | Item     |   |
| 29 | Attendance and contract management                                                                                                                                                                    | Item     |   |
| 30 | Site Establishment                                                                                                                                                                                    | Item     |   |
| 31 | Project Engineering Management and Quality Control Testing, balancing, commissioning and handover of air conditioning units and fans including compilation of submitted to the Engineer for approval. | Item     |   |
| 32 | Operation and Maintenance Instruction Manuals                                                                                                                                                         | Sets 4,0 |   |
| 33 | User Training                                                                                                                                                                                         | Item     |   |
| 34 | Sets of "as built" drawings hard and soft copies(3 sets)                                                                                                                                              | No 3     |   |
| 35 | 12 Months free maintenance                                                                                                                                                                            | Item     |   |
| 36 | Any other item neccesary that might have been omitted (allow 5%)                                                                                                                                      | Item     |   |
| 37 | P's and G's                                                                                                                                                                                           | Item     |   |
|    | <b><u>Multi-Purpose Hall</u></b>                                                                                                                                                                      |          |   |
|    | <b><u>Installation of Ducts shall include all fittings , accessories &amp; connections to complete the installation.</u></b>                                                                          |          |   |
|    | <b><u>Door grilles, weather louvers and diffuser</u></b>                                                                                                                                              |          |   |
| 38 | Double sided door grille natural anodised aluminium 300x150                                                                                                                                           | No 6     |   |
| 39 | Weather louvers c/w vermin proof screens 400x300 storm resistant                                                                                                                                      | No 2     |   |
|    | <b>Carried Forward</b>                                                                                                                                                                                |          | R |
|    | Section No. 5                                                                                                                                                                                         |          |   |
|    | Bill No. 1                                                                                                                                                                                            |          |   |
|    | MECHANICAL                                                                                                                                                                                            |          |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    |                                                                                                                                                                                                          |    |    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
|    | <b>Brought Forward</b>                                                                                                                                                                                   |    | R  |
| 40 | 600x600 supply air diffusers constant volume type c/w<br>350mm diameter neck.Allow for 1.5m flexible ducting<br>and spigot                                                                               | No | 18 |
| 41 | 200mmø Supply Air Disc Valves powder coated                                                                                                                                                              | No | 2  |
| 42 | Equipment and Fans<br>EAF 1 - 605mm Diameter Roof Extraction fan of<br>2475L/s, 2,85kW,@100Pa c/w 1.5D attenuators before<br>and after and all fittings and collars to connect to duct.                  | No | 2  |
| 43 | Wall mount Extract air Fan 30 l/s @ 60W                                                                                                                                                                  | No | 9  |
| 44 | Wall mount Extract air Fan 100 l/s @ 108W                                                                                                                                                                | No | 2  |
|    | <b>Ductwork</b>                                                                                                                                                                                          |    |    |
|    | <b>Note: Rate to include support machanism</b><br><b>Externally insulated galvanised low pressure</b><br><b>rectangular ducting supported from structural steel</b><br><b>via hangars and 8mm thread</b> |    |    |
| 45 | Category 1                                                                                                                                                                                               | m2 | 66 |
|    | <b>Extra over for low pressure ducting -</b>                                                                                                                                                             |    |    |
| 46 | Category 1 - Stop ends, Radius bends, Square bends,<br>45° bends, 15° bends, 90° bends, transformations, tees                                                                                            | No | 30 |
| 47 | Extra over for round duct spigot<br>250 mm Ø                                                                                                                                                             | m  | 10 |
| 48 | Extra over for round duct elbows - 45° & 90°<br>250 mm Ø                                                                                                                                                 | No | 15 |
|    | <b>Economics Block</b>                                                                                                                                                                                   |    |    |
|    | <b>Carried Forward</b>                                                                                                                                                                                   |    | R  |
|    | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                                                |    |    |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |    | R  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| <b><u>N.B: Deliever, Supply and Install and Commission all the items below</u></b><br><b><u>Insulated Flexible ductwork not exceeding 1.5 m girth, externally</u></b><br><b><u>insulated with 25mm foil faced fibreglass, including jubilee duct clamps and vapour barrier tape</u></b><br><b><u>250 mm Ø</u></b> |                                                                                                                                                                                                     |    |    |
| 49                                                                                                                                                                                                                                                                                                                | Duct Insulation including galvanized metal strapping for closure around ducts and vapour barrier duct tape 25mm FRK Insulation                                                                      | No | 8  |
| 50                                                                                                                                                                                                                                                                                                                | Extra over for low pressure ducting - Category 1 - Stop ends, Radius bends, Square bends, 45° bends, 15° bends, 90° bends, transformations, tees                                                    | No | 5  |
| 51                                                                                                                                                                                                                                                                                                                | Extra over for round duct spigot 200 mm Ø                                                                                                                                                           | m  | 4  |
| 52                                                                                                                                                                                                                                                                                                                | Un-Insulated Flexible ductwork not exceeding 1.5 m girth, including jubilee duct clamps 200 mm Ø Refrigerant Piping Complete With Insulation in galvanized trunking between indoor and outdoor unit | No | 4  |
| 53                                                                                                                                                                                                                                                                                                                | 6.35mm soft drawn refrigerant piping                                                                                                                                                                | m  | 20 |
| 54                                                                                                                                                                                                                                                                                                                | 9.52mm soft drawn refrigerant piping                                                                                                                                                                | m  | 20 |
| 55                                                                                                                                                                                                                                                                                                                | 19.7mm hard drawn refrigerant piping                                                                                                                                                                | m  | 20 |
| 56                                                                                                                                                                                                                                                                                                                | PVC drain piping, chased into wall or floor 20mm                                                                                                                                                    | m  | 30 |
| 57                                                                                                                                                                                                                                                                                                                | PVC drain piping, fixed on roof trusses 32mm<br>N.B: Deliever, Supply and Install and Commission all the items below<br>Roof Mounted Evaporative cooler D125/T125 or similar approved with          | m  | 20 |
| 58                                                                                                                                                                                                                                                                                                                | 2900L/s @ 1230W input power c/w corresponding filter pads, circulation                                                                                                                              | No | 2  |
| 59                                                                                                                                                                                                                                                                                                                | pump and all necessary electrical connections to operate                                                                                                                                            | No | 1  |
| Carried Forward                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |    | R  |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                     |    |    |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                                               |                                                                                                                                                                              |    | R   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| 60                                                                                                                                                            | Roof Mounted Evaporative with 615L/s @ 80Pa ;160W input power c/w corresponding filter pads, circulation pump and all necessary electrical connections to operate            | No | 1   |
| 61                                                                                                                                                            | Concealed Ceiling Unit 25.3kW Sensilbe Cooling @ 450l/s<br>Non - insulated galvanised low pressure spiral ducting supported from structural steel via hangars and 8mm thread | No | 1   |
| 62                                                                                                                                                            | Category 1 Ducting                                                                                                                                                           | m2 | 170 |
| 63                                                                                                                                                            | Category 2 Ducting                                                                                                                                                           | m2 | 55  |
| 64                                                                                                                                                            | Category 3 Ducting                                                                                                                                                           | m2 | 40  |
| <b><u>Extra over for low pressure ducting -</u></b>                                                                                                           |                                                                                                                                                                              |    |     |
| 65                                                                                                                                                            | Stop ends ,Radius bends, Square bends 45 ,bends 90 bends transformation ,tees                                                                                                | No | 10  |
| 66                                                                                                                                                            | Category 1 Ducting Fittings                                                                                                                                                  | No | 122 |
| 67                                                                                                                                                            | Category 2 Ducting Fittings                                                                                                                                                  | No | 15  |
| 68                                                                                                                                                            | Category 3 Ducting Fittings                                                                                                                                                  | No | 15  |
| 69                                                                                                                                                            | Refrigerant Piping Complete with Insulation in galvanized trunking between indoor and outdoor unit 6.35soft drawn refrigerant piping                                         | m  | 10  |
| 70                                                                                                                                                            | 9.522mm soft drawn refrigerant piping                                                                                                                                        | m  | 12  |
| 71                                                                                                                                                            | 15,9 soft drawn refrigerant piping                                                                                                                                           | m  | 15  |
| 72                                                                                                                                                            | PVC drain piping chased into wall or floor                                                                                                                                   | m  | 20  |
| 73                                                                                                                                                            | 20mm<br>32mm                                                                                                                                                                 | No | 1   |
| <b><u>ELECTRICAL DISTRIBUTION</u></b>                                                                                                                         |                                                                                                                                                                              |    |     |
| <b><u>Electrical boards c/w sheet metal trays, frames, sub frames and legend card including all equipment complete as described in the specification.</u></b> |                                                                                                                                                                              |    |     |
| <b><u>AC - DB 1 (Admin)</u></b>                                                                                                                               |                                                                                                                                                                              |    |     |
| Carried Forward                                                                                                                                               |                                                                                                                                                                              |    | R   |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                     |                                                                                                                                                                              |    |     |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                           |                                                                                                                                     |      | R  |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------|----|
| <b><u>AC - DB 2 (Media Centre)</u></b>                                                                                    |                                                                                                                                     |      |    |
| 74                                                                                                                        | 600/1000v/PVC/SWA/PVC Copper cable fixed to cable ladders.                                                                          | No   | 1  |
| 75                                                                                                                        | 2.5mm <sup>2</sup> x 2 core                                                                                                         | m    | 35 |
| 76                                                                                                                        | 0.4mm <sup>2</sup> x 3 core                                                                                                         | m    | 30 |
| 77                                                                                                                        | 4mm <sup>2</sup> x 4 core<br>Galvanized light duty cables trays including hangers supports                                          | m    | 20 |
| 78                                                                                                                        | P8000 Unistrut Cable Tray                                                                                                           | m    | 50 |
| 79                                                                                                                        | Horizontal Tees                                                                                                                     | No   | 5  |
| 80                                                                                                                        | Elbow                                                                                                                               | No   | 5  |
| <b><u>GUARDHOUSE</u></b>                                                                                                  |                                                                                                                                     |      |    |
| <b><u>Air Conditioning Indoor Units</u></b>                                                                               |                                                                                                                                     |      |    |
| <b><u>Inverter Type Split Units</u></b>                                                                                   |                                                                                                                                     |      |    |
| 81                                                                                                                        | Inveter Midwall Split Unit with 2.6Kw Cooling Capacity and 2.8kW Heating Capacity complete installation with outdoor                | No   | 1  |
| 82                                                                                                                        | Refrigerent Pipes<br>Diameter 9mm copper pipe                                                                                       | m    | 2  |
| 83                                                                                                                        | Pipe Insulation<br>Diameter 9mm copper pipe insulation                                                                              | m    | 2  |
| 84                                                                                                                        | Electrical Installations & connections<br>Cabling power supply and all electrical work related to HVAC installation on this project | Item |    |
| <b><u>Ventilation Ducts</u></b>                                                                                           |                                                                                                                                     |      |    |
| <b><u>Installation of Ducts shall include all fittings ,accessories &amp; connections to complete the instalation</u></b> |                                                                                                                                     |      |    |
| 85                                                                                                                        | WL 01 -KV 150m Wall Mounted Extract Fan with Duty of 75L/s @ 50Pa ,59W , 1ph c/w                                                    | No   | 2  |
| Carried Forward                                                                                                           |                                                                                                                                     |      | R  |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                 |                                                                                                                                     |      |    |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                                        |                                                                                       |        |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| <u>inside and outside Louvres the outside louvre To be Weather Proof and Have Birds Barrier. Electrical box .Timer Controlled</u>      |                                                                                       |        |
| 86                                                                                                                                     | WI 02- KV100M Wall Mounted Extract Fan with Duty of 50L/s @50 Pa.59W, 1 ph cw         | No 2   |
| <u>inside and outside Louvres ,the Outside louvre To be Weather Proof and Have Birds Barrier ,Electrical box ,Timer Controlled</u>     |                                                                                       |        |
| 87                                                                                                                                     | FAF01 Diameter 315M -K/K 315 Circular duct inline fan 280L/s @230 Pa 202W ,1 ph       | No 2   |
| <u>cw inside and outside Louvres , the outside louvre To be Weather Proof And Have Birds Barrier ,Electrical box, Timer Controlled</u> |                                                                                       |        |
| <u>Supply Air Ducts , Fittings and Accessories</u>                                                                                     |                                                                                       |        |
| 88                                                                                                                                     | Category 1 Ducting                                                                    | m2 120 |
| 89                                                                                                                                     | Category 1 Ducting Fittings                                                           | No 50  |
| <u>Toilet Extraction Ducts , Fittings and Accessories</u>                                                                              |                                                                                       |        |
| 90                                                                                                                                     | Category 1 Ducting                                                                    | m2 220 |
| 91                                                                                                                                     | Category 1 Ducting Fittings                                                           | No 80  |
| <u>Air TERMINALS</u>                                                                                                                   |                                                                                       |        |
| 92                                                                                                                                     | Install and connect with all neccesary fittings and accessories                       | No 8   |
| 93                                                                                                                                     | 600*600 Constant Air Supply Diffusers with neck diameter 200mm                        | No 2   |
| 94                                                                                                                                     | 300*200 Weather Louvres cw all Fittings and accessories fully installed & Functioning | No 2   |
| 95                                                                                                                                     | 200*100 Return Air Grillers c/w Fittings and accessories                              | No 2   |
| 96                                                                                                                                     | 400*300 Door Grillers c/w Fittings and accessories                                    | No 2   |
| 97                                                                                                                                     | 150 dia powder coated allminium disc valve                                            | No 2   |
| 98                                                                                                                                     | 200 dia powder coated alliminum disc valve                                            | No 2   |
| Carried Forward                                                                                                                        |                                                                                       |        |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                              |                                                                                       |        |

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# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |      | R |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|---|
| 99  | WL 2 -150*150 Weather Louvres cw all fittings and accessories fully installed & Functioning                                                                                                                                                                                                                                                                                                                                                                                 | No | 2    |   |
| 100 | WL 1 200*200 Weather Louvres cw all fittings and accessories fully installed & Functioning                                                                                                                                                                                                                                                                                                                                                                                  | No | 2    |   |
|     | <b><u>Electrical Installation &amp; connection</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                      |    |      |   |
| 101 | Cabling ,power supply and all electrical work related to HVAC Installation on this project                                                                                                                                                                                                                                                                                                                                                                                  |    | Item |   |
|     | <b><u>KITCHEN EQUIPMENT</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |      |   |
|     | <b><u>Note: Supply, install, test and commission Kitchen Canopy c/w single stage axial flow kitchen canopy air extract fan, rectangular black steel sheetmetal ductwork air extract system, including transformation pieces, bends, tees, spigots, discharge venturi, etc. installed on the Kitchen roof and in the Kitchen, manufactured in accordance with SANS 1850 , as amended, including all necessary supports, fixing, brackets, flexible connections, etc.</u></b> |    |      |   |
| 102 | 3 burner gas stove with oven                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | 1    |   |
| 103 | 200lt Single polaris cooker mixer                                                                                                                                                                                                                                                                                                                                                                                                                                           | No | 1    |   |
| 104 | 80 lt Electric fryingTilting pan                                                                                                                                                                                                                                                                                                                                                                                                                                            | No | 1    |   |
| 105 | 20lt combi master with trolley included                                                                                                                                                                                                                                                                                                                                                                                                                                     | No | 1    |   |
| 106 | 135lt Boiling pan                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No | 1    |   |
| 107 | 20 Slices bread slicer                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No | 1    |   |
| 108 | 30lt Mixer onstand                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No | 1    |   |
| 109 | 1050 - Stainless steel table c/w splash back and undershelf                                                                                                                                                                                                                                                                                                                                                                                                                 | No | 3    |   |
| 110 | Potatoe peeler on stand,12kg                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | 1    |   |
| 111 | Chopping block                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No | 1    |   |
| 112 | 1000x620mm Inlet table c/w sink bowl spray over                                                                                                                                                                                                                                                                                                                                                                                                                             | No | 1    |   |
|     | <b>Carried Forward</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |      | R |
|     | Section No. 5                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |      |   |
|     | Bill No. 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |      |   |
|     | MECHANICAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                   |    |    | R |
|-----|---------------------------------------------------------------------------------------------------|----|----|---|
| 113 | 1000x620mm Outlet table                                                                           | No | 1  |   |
| 114 | Dishwasher conveyor hood type                                                                     | No | 1  |   |
| 115 | Pre rinse sink c/w O/H spray 1000x620 DIRTIES dump table c/w S/hole and flaf shelf over 1650 x620 | No | 1  |   |
| 116 | 3hp waste disposal unit                                                                           | No | 1  |   |
| 117 | Double centre bowl prep sink                                                                      | No | 2  |   |
| 118 | 3,7 x 3,2m Coldroom Storage                                                                       | No | 1  |   |
| 119 | Stainless steel storage shelving                                                                  | No | 28 |   |
| 120 | Extraction Canopy 1500 x 6200 mm                                                                  | No | 1  |   |
|     | <b><u>KITCHEN EQUIPMENT NUTRITION BLOCK</u></b>                                                   |    |    |   |
| 121 | Potatoe peeler on stand                                                                           | No | 1  |   |
| 122 | Combination sink - VPS 1850                                                                       | No | 1  |   |
| 123 | 1050 - Stainless steel table c/w splash back and undershelf                                       | No | 6  |   |
| 124 | Double centre bowl prep sonk - DCBS 2250                                                          | No | 1  |   |
| 125 | Double centre bowl pot sink -DCBPS 2250                                                           | No | 1  |   |
| 126 | Chooping block -CB                                                                                | No | 1  |   |
| 127 | 30litre mixer on stand                                                                            | No | 1  |   |
| 128 | 1650 - Stainless steel table c/w splash back and undershelf                                       | No | 5  |   |
| 129 | 1000x620mm Inlet table c/w sink bowl spray over                                                   | No | 1  |   |
| 130 | 1000x620mm Outlet table                                                                           | No | 1  |   |
| 131 | Dishwasher conveyor hood type                                                                     | No | 1  |   |
| 132 | Pre rinse sink c/w O/H spray 1000x620 DIRTIES dump table c/w S/hole and flaf shelf over 1650 x620 | No | 1  |   |
| 133 | 3hp waste disposal unit                                                                           | No | 1  |   |
|     | <b>Carried Forward</b>                                                                            |    |    | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                         |    |    |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                                                                            |                                                                                                                                                    |    |    | R |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----|----|---|
| 134                                                                                                                        | SST 1650 Stainless steel table c/w undershelf                                                                                                      | No | 6  |   |
| 135                                                                                                                        | Mobile Crockery Rack MCR 4                                                                                                                         | No | 1  |   |
| 136                                                                                                                        | Multi pot c/w plinth and drip tray 25litre                                                                                                         | No | 1  |   |
| 137                                                                                                                        | 50litre wall mounted Boiler                                                                                                                        | No | 1  |   |
| 138                                                                                                                        | Unheated Counter C-1130                                                                                                                            | No | 2  |   |
| 139                                                                                                                        | Bain Marie Hot Cupboard c/w riser shelf BMHC-1800E                                                                                                 | No | 2  |   |
| 140                                                                                                                        | Underbar Refrigerator                                                                                                                              | No | 1  |   |
| 141                                                                                                                        | 20lt combi master with trolley included                                                                                                            | No | 1  |   |
| 142                                                                                                                        | 3 burner gas stove with oven                                                                                                                       | No | 1  |   |
| 143                                                                                                                        | 80 lt Electric fryingTilting pan                                                                                                                   | No | 2  |   |
| 144                                                                                                                        | 200lt Single polaris cooker mixer                                                                                                                  | No | 1  |   |
| 145                                                                                                                        | 20 Slices bread slicer                                                                                                                             | No | 1  |   |
| 146                                                                                                                        | Wash hand basin                                                                                                                                    | No | 1  |   |
| 147                                                                                                                        | Mobile Pot Rack-MPR                                                                                                                                | No | 1  |   |
| 148                                                                                                                        | General purpose trolley                                                                                                                            | No | 2  |   |
| 149                                                                                                                        | Stainless steel storage shelving                                                                                                                   | No | 28 |   |
| 150                                                                                                                        | Extraction canopy 2.6 x 4.4m                                                                                                                       | No | 1  |   |
| <b><u>VENTILATION DUCTS</u></b>                                                                                            |                                                                                                                                                    |    |    |   |
| <b><u>Installation of Ducts shall include all fittings, accessories &amp; connections to complete the installation</u></b> |                                                                                                                                                    |    |    |   |
| 151                                                                                                                        | FAF 1- Diameter 800mm DVN900D6 Roof Duct Incline Fan 4650l/s, 4kW, 3ph c/w 2x1.5D Sounf Attenuators With Pods and Electrical Box. Timer Controlled | No | 4  |   |
| 152                                                                                                                        | FAF 1 - Diameter 450 KD450XL Mixed Flow Fan 1976l/s , 1,392kW,3ph c/w 2x1.5D Sound Attenuators With Pods And Electrical Box , Timer Controlled     | No | 8  |   |
| Carried Forward                                                                                                            |                                                                                                                                                    |    |    | R |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                  |                                                                                                                                                    |    |    |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                       |    |      | R |
|-----|---------------------------------------------------------------------------------------|----|------|---|
|     | <b><u>Supply Air Ducts, Fittings and Accessories</u></b>                              |    |      |   |
| 153 | Category 1 Ducting                                                                    | m2 | 920  |   |
| 154 | Category 1 Duct Fittings                                                              | No | 80   |   |
|     | <b><u>AIR TERMINALS</u></b>                                                           |    |      |   |
|     | <b><u>Install and connect with all neccessary fittings and accessories</u></b>        |    |      |   |
| 155 | 600*600 Constant Air Supply Diffusers with neck diameter 200mm                        | No | 2    |   |
| 156 | 650*650 Weather Louvres cw all Fittings and accessories fully installed & Functioning | No | 2    |   |
| 157 | 200 dia powder coated aliminium disc valve                                            | No | 2    |   |
| 158 | 400*300 Door Grillers c/w Fittings and accessories                                    | No | 2    |   |
|     | <b><u>Electrical Installation &amp; connections</u></b>                               |    |      |   |
| 159 | Cabling, power supply and all electrical work related to HVAC installation            |    | Item |   |
|     | <b><u>WET SERVICES (SANITATION) INSTALLATION</u></b>                                  |    |      |   |
|     | <b><u>GUARD HOUSE</u></b>                                                             |    |      |   |
| 160 | 50mm Diameter Pipe                                                                    | m  | 380  |   |
| 161 | 110mm Diameter Pipe                                                                   | m  | 380  |   |
|     | <b><u>Extra over uPVC pipes for fittings:</u></b>                                     |    |      |   |
| 162 | 50mm Diameter x 45° bend                                                              | No | 2    |   |
| 163 | 50mm Diameter x 90° bend                                                              | No | 1    |   |
| 164 | 50mm Couplings                                                                        | No | 2    |   |
| 165 | 50mm Bend with inspection eye                                                         | No | 1    |   |
| 166 | 50mm Junction                                                                         | No | 1    |   |
| 167 | 50mm Junction with inspection eye                                                     | No | 1    |   |
|     | <b>Carried Forward</b>                                                                |    |      | R |
|     | Section No. 5                                                                         |    |      |   |
|     | Bill No. 1                                                                            |    |      |   |
|     | MECHANICAL                                                                            |    |      |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                   |    |    | R |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------|----|----|---|
| 168 | 50mm Reducer                                                                                                                                      | No | 1  |   |
| 169 | 50mm Reducer junction                                                                                                                             | No | 1  |   |
| 170 | 50mm Two-way air vent valve                                                                                                                       | No | 2  |   |
| 171 | 110mm Diameter x 22.5° bend                                                                                                                       | No | 2  |   |
| 172 | 110mm Diameter x 45° bend                                                                                                                         | No | 1  |   |
| 173 | 110mm Diameter x 90° bend                                                                                                                         | No | 1  |   |
| 174 | 110mm Couplings                                                                                                                                   | No | 2  |   |
| 175 | 110mm Bend with inspection eye                                                                                                                    | No | 1  |   |
| 176 | 110mm Junction                                                                                                                                    | No | 1  |   |
| 177 | 110mm Junction with inspection eye                                                                                                                | No | 4  |   |
| 178 | 110mm Reducer                                                                                                                                     | No | 1  |   |
| 179 | 110mm Reducer junction                                                                                                                            | No | 1  |   |
| 180 | 110mm Vent valve                                                                                                                                  | No | 1  |   |
| 181 | 110mm Two-way vent valve                                                                                                                          | No | 1  |   |
| 182 | 200x200x100mm Sewer junction                                                                                                                      | No | 1  |   |
| 183 | 100mm Pan connector                                                                                                                               | No | 1  |   |
| 184 | 100mm Bent pan connector                                                                                                                          | No | 1  |   |
| 185 | UPVC Glue                                                                                                                                         | No | 1  |   |
| 186 | 50 mm anti-vac Traps - bottle type with s/s finish                                                                                                | No | 10 |   |
| 187 | 50 mm anti-vac Trap                                                                                                                               | No | 1  |   |
| 188 | 110 mm stub Stack c/w one way vent valve                                                                                                          | No | 1  |   |
| 189 | Rodding eye units complete in accordance with SABS<br>Including concrete stabilization footing, Eye Cover,<br>identification, piping and fittings | No | 2  |   |
|     | Carried Forward                                                                                                                                   |    |    | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                         |    |    |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|                                           | Brought Forward                                                                                                                                                                                  |    |    | R |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|---|
|                                           | <u>Cast iron socketed heavy duty soil and waste piping laid to falls in concrete floors (It must be noted that all underground pipework must be HDPE with fusion welded joints and fittings)</u> |    |    |   |
| 190                                       | 110mm Diameter pipe                                                                                                                                                                              | m  | 12 |   |
| 191                                       | 110mm Bend                                                                                                                                                                                       | No | 12 |   |
| 192                                       | 110mm SSN couplings                                                                                                                                                                              | No | 12 |   |
| 193                                       | 110mm Cast iron pan connector                                                                                                                                                                    | No | 12 |   |
|                                           | <u>MULTIPURPOSE HALL</u>                                                                                                                                                                         |    |    |   |
| 194                                       | 50mm Diameter Pipe                                                                                                                                                                               | m  | 50 |   |
| 195                                       | 110mm Diameter Pipe                                                                                                                                                                              | m  | 50 |   |
|                                           | <u>Extra over uPVC pipes for fittings:</u>                                                                                                                                                       |    |    |   |
| 196                                       | 50mm Diameter x 45° bend                                                                                                                                                                         | No | 2  |   |
| 197                                       | 50mm Diameter x 90° bend                                                                                                                                                                         | No | 1  |   |
| 198                                       | 50mm Couplings                                                                                                                                                                                   | No | 2  |   |
| 199                                       | 50mm Bend with inspection eye                                                                                                                                                                    | No | 1  |   |
| 200                                       | 50mm Junction                                                                                                                                                                                    | No | 1  |   |
| 201                                       | 50mm Junction with inspection eye                                                                                                                                                                | No | 2  |   |
| 202                                       | 50mm Reducer                                                                                                                                                                                     | No | 1  |   |
| 203                                       | 50mm Reducer junction                                                                                                                                                                            | No | 1  |   |
| 204                                       | 50mm Two-way air vent valve                                                                                                                                                                      | No | 3  |   |
| 205                                       | 110mm Diameter x 22.5° bend                                                                                                                                                                      | No | 2  |   |
| 206                                       | 110mm Diameter x 45° bend                                                                                                                                                                        | No | 1  |   |
| 207                                       | 110mm Diameter x 90° bend                                                                                                                                                                        | No | 1  |   |
| 208                                       | 110mm Couplings                                                                                                                                                                                  | No | 2  |   |
|                                           | Carried Forward                                                                                                                                                                                  |    |    | R |
| Section No. 5<br>Bill No. 1<br>MECHANICAL |                                                                                                                                                                                                  |    |    |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     |                                                                                                                                                                                                                     |    |    |   |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|---|
|     | <b>Brought Forward</b>                                                                                                                                                                                              |    | R  |   |
| 209 | 110mm Bend with inspection eye                                                                                                                                                                                      | No | 1  |   |
| 210 | 110mm Junction                                                                                                                                                                                                      | No | 1  |   |
| 211 | 110mm Junction with inspection eye                                                                                                                                                                                  | No | 4  |   |
| 212 | 110mm Reducer                                                                                                                                                                                                       | No | 1  |   |
| 213 | 110mm Reducer junction                                                                                                                                                                                              | No | 1  |   |
| 214 | 110mm Vent valve                                                                                                                                                                                                    | No | 1  |   |
| 215 | 110mm Two-way vent valve                                                                                                                                                                                            | No | 1  |   |
| 216 | 200x200x100mm Sewer junction                                                                                                                                                                                        | No | 1  |   |
| 217 | 100mm Pan connector                                                                                                                                                                                                 | No | 1  |   |
| 218 | 100mm Bent pan connector                                                                                                                                                                                            | No | 1  |   |
| 219 | UPVC Glue                                                                                                                                                                                                           | No | 1  |   |
| 220 | 50 mm anti-vac Traps - bottle type with s/s finish                                                                                                                                                                  | No | 10 |   |
| 221 | 50 mm anti-vac Trap                                                                                                                                                                                                 | No | 1  |   |
| 222 | 110 mm stub Stack c/w one way vent valve                                                                                                                                                                            | No | 1  |   |
| 223 | Rodding eye units complete in accordance with SABS<br>Including concrete stabilization footing, Eye Cover,<br>identification,piping and fittings                                                                    | No | 2  |   |
|     | <b><u>Cast iron socketed heavy duty soil and waste piping<br/>laid to falls in concrete floors (It must be noted that<br/>all underground pipework must be HDPE with fusion<br/>welded joints and fittings)</u></b> |    |    |   |
| 224 | 110mm Diameter pipe                                                                                                                                                                                                 | m  | 12 |   |
| 225 | 110mm Bend                                                                                                                                                                                                          | No | 12 |   |
| 226 | 110mm SSN couplings                                                                                                                                                                                                 | No | 12 |   |
| 227 | 110mm Cast iron pan connector                                                                                                                                                                                       | No | 12 |   |
|     | <b>Carried Forward</b>                                                                                                                                                                                              |    |    | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                                                           |    |    |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     |                                                   |   |
|-----|---------------------------------------------------|---|
|     | Brought Forward                                   | R |
|     | <b><u>CAFETERIA</u></b>                           |   |
| 228 | 50mm Diameter Pipe m 55                           |   |
| 229 | 110mm Diameter Pipe m 55                          |   |
|     | <b><u>Extra over uPVC pipes for fittings:</u></b> |   |
| 230 | 50mm Diameter x 45° bend No 2                     |   |
| 231 | 50mm Diameter x 90° bend No 1                     |   |
| 232 | 50mm Couplings No 2                               |   |
| 233 | 50mm Bend with inspection eye No 1                |   |
| 234 | 50mm Junction No 1                                |   |
| 235 | 50mm Junction with inspection eye No 1            |   |
| 236 | 50mm Reducer No 1                                 |   |
| 237 | 50mm Reducer junction No 1                        |   |
| 238 | 50mm Two-way air vent valve No 2                  |   |
| 239 | 110mm Diameter x 22.5° bend No 2                  |   |
| 240 | 110mm Diameter x 45° bend No 1                    |   |
| 241 | 110mm Diameter x 90° bend No 1                    |   |
| 242 | 110mm Couplings No 2                              |   |
| 243 | 110mm Bend with inspection eye No 1               |   |
| 244 | 110mm Junction No 1                               |   |
| 245 | 110mm Junction with inspection eye No 4           |   |
| 246 | 110mm Reducer No 1                                |   |
| 247 | 110mm Reducer junction No 2                       |   |
| 248 | 110mm Vent valve No 1                             |   |
| 249 | 110mm Two-way vent valve No 1                     |   |
|     | Carried Forward                                   | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL         |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                                                                                     |    |     | R |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|---|
| 250 | 200x200x100mm Sewer junction                                                                                                                                                                                        | No | 1   |   |
| 251 | 100mm Pan connector                                                                                                                                                                                                 | No | 1   |   |
| 252 | 100mm Bent pan connector                                                                                                                                                                                            | No | 1   |   |
| 253 | UPVC Glue                                                                                                                                                                                                           | No | 1   |   |
| 254 | 50 mm anti-vac Traps - bottle type with s/s finish                                                                                                                                                                  | No | 10  |   |
| 255 | 50 mm anti-vac Trap                                                                                                                                                                                                 | No | 1   |   |
| 256 | 110 mm stub Stack c/w one way vent valve                                                                                                                                                                            | No | 1   |   |
| 257 | Rodding eye units complete in accordance with SABS<br>Including concrete stabilization footing, Eye Cover,<br>identification, piping and fittings                                                                   | No | 2   |   |
|     | <b><u>Cast iron socketed heavy duty soil and waste piping<br/>laid to falls in concrete floors (It must be noted that<br/>all underground pipework must be HDPE with fusion<br/>welded joints and fittings)</u></b> |    |     |   |
| 258 | 110mm Diameter pipe                                                                                                                                                                                                 | m  | 12  |   |
| 259 | 110mm Bend                                                                                                                                                                                                          | No | 12  |   |
| 260 | 110mm SSN couplings                                                                                                                                                                                                 | No | 12  |   |
| 261 | 110mm Cast iron pan connector                                                                                                                                                                                       | No | 12  |   |
|     | <b><u>HOT WATER SERVICES</u></b>                                                                                                                                                                                    |    |     |   |
|     | <b><u>Class O hard drawn copper pipes complying with<br/>SABS 460</u></b>                                                                                                                                           |    |     |   |
| 262 | Class O hard drawn copper pipes complying with SABS<br>460:<br>15mm Diameter pipe                                                                                                                                   | m  | 100 |   |
| 263 | 15mm Bend                                                                                                                                                                                                           | No | 100 |   |
| 264 | 15mm Tee                                                                                                                                                                                                            | No | 70  |   |
| 265 | 15mm Female to female couplings                                                                                                                                                                                     | No | 50  |   |
| 266 | 22mm x 15mm Eccentric reducer                                                                                                                                                                                       | No | 40  |   |
|     | <b>Carried Forward</b>                                                                                                                                                                                              |    |     | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                                                           |    |     |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     |                                 | Brought Forward |    | R |
|-----|---------------------------------|-----------------|----|---|
| 267 | 22mm Diameter pipe              | m               | 40 |   |
| 268 | 22mm Bend                       | No              | 40 |   |
| 269 | 22mm Tee                        | No              | 40 |   |
| 270 | 22mm Female to female couplings | No              | 40 |   |
| 271 | 28mm x 22mm Eccentric reducer   | No              | 40 |   |
| 272 | 28mm Diameter pipe              | m               | 40 |   |
| 273 | 28mm Bend                       | No              | 40 |   |
| 274 | 28mm Tee                        | No              | 40 |   |
| 275 | 28mm Female to female couplings | No              | 30 |   |
| 276 | 35mm x 28mm Eccentric reducer   | No              | 30 |   |
| 277 | 35mm Diameter pipe              | m               | 30 |   |
| 278 | 35mm Bend                       | No              | 10 |   |
| 279 | 35mm Tee                        | No              | 10 |   |
| 280 | 35mm Female to female couplings | No              | 10 |   |
| 281 | 42mm x 35mm Eccentric reducer   | No              | 10 |   |
| 282 | 42mm Diameter pipe              | m               | 10 |   |
| 283 | 42mm Bend                       | No              | 15 |   |
| 284 | 42mm Tee                        | No              | 10 |   |
| 285 | 42mm Female to female couplings | No              | 10 |   |
| 286 | 48mm x 42mm Eccentric reducer   | No              | 15 |   |
| 287 | 48mm Diameter pipe              | m               | 10 |   |
| 288 | 48mm Bend                       | No              | 10 |   |
| 289 | 48mm Tee                        | No              | 10 |   |
| 290 | 48mm Female to female couplings | No              | 10 |   |
|     |                                 |                 |    |   |
|     |                                 | Carried Forward |    | R |
|     | Section No. 5                   |                 |    |   |
|     | Bill No. 1                      |                 |    |   |
|     | MECHANICAL                      |                 |    |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     |                                                                                                                                                                                                                                                         | Brought Forward |     | R |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|---|
| 291 | 54mm x 48mm Eccentric reducer                                                                                                                                                                                                                           | No              | 15  |   |
| 292 | 54mm Diameter pipe                                                                                                                                                                                                                                      | m               | 10  |   |
| 293 | 54mm Bend                                                                                                                                                                                                                                               | No              | 10  |   |
| 294 | 54mm Tee                                                                                                                                                                                                                                                | No              | 10  |   |
| 295 | 32mm Fittings                                                                                                                                                                                                                                           | No              | 10  |   |
| 296 | 42mm Fittings                                                                                                                                                                                                                                           | No              | 10  |   |
| 297 | 48mm Fittings                                                                                                                                                                                                                                           | No              | 10  |   |
| 298 | 54mm Fittings                                                                                                                                                                                                                                           | m               | 12  |   |
| 299 | 32mm Compression rings                                                                                                                                                                                                                                  | No              | 300 |   |
| 300 | 42mm Compression rings                                                                                                                                                                                                                                  | No              | 200 |   |
| 301 | 48mm Compression rings                                                                                                                                                                                                                                  | No              | 180 |   |
| 302 | 54mm Compression rings                                                                                                                                                                                                                                  | No              | 100 |   |
| 303 | 15mm Compression rings                                                                                                                                                                                                                                  | No              | 80  |   |
| 304 | 22mm Compression rings                                                                                                                                                                                                                                  | No              | 30  |   |
| 305 | 28mm Compression rings                                                                                                                                                                                                                                  | No              | 30  |   |
|     | <b><u>ELECTRIC AND SOLAR WATER HEATER</u></b>                                                                                                                                                                                                           |                 |     |   |
|     | <b><u>NB: prices should include corresponding isolating valves, 400kpa expansion valves, PRV,gauges, electrical connection, strainers, non-return valves ect... to make the system work.</u></b>                                                        |                 |     |   |
| 306 | 150L Horizontal Indirect Solar water heater mounted flat on the roof c/w supporting structucter, solar collector panel, corresponding valves, fittings, thermal pipe lagging, drip tray c/w drain pipe and accessories for Cafeteria & Nutrition Blocks | No              | 2   |   |
|     |                                                                                                                                                                                                                                                         |                 |     |   |
|     |                                                                                                                                                                                                                                                         | Carried Forward |     | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                                                                                               |                 |     |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|     | Brought Forward                                                                                                                                                                                                                                                                                      |    |      | R |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|---|
| 307 | 1200L Vertical Hot water mild steel vessel coated with sigmarite sealer inside.Cladded with satinless stee. By-pass switch,all valves, concrete plinth of 1200mmX1200mm area,all gauges and corresponding fittings. A 2L/s in-line circulating pump with a startic head of 6m placed on return pipe. | No | 4    |   |
|     | <b>( COLD Water Services)</b>                                                                                                                                                                                                                                                                        |    |      |   |
|     | <b><u>Class O hard drawn copper pipes complying with SABS 460:</u></b>                                                                                                                                                                                                                               |    |      |   |
| 308 | 15mm Diameter pipe                                                                                                                                                                                                                                                                                   | m  | 335  |   |
| 309 | 15mm Bend                                                                                                                                                                                                                                                                                            | No | 230  |   |
| 310 | 15mm Tee                                                                                                                                                                                                                                                                                             | No | 230  |   |
| 311 | 15mm Female to female couplings                                                                                                                                                                                                                                                                      | No | 230  |   |
| 312 | 22mm x 15mm Eccentric reducer                                                                                                                                                                                                                                                                        | No | 140  |   |
| 313 | 22mm Diameter pipe                                                                                                                                                                                                                                                                                   | m  | 140  |   |
| 314 | 22mm Bend                                                                                                                                                                                                                                                                                            | No | 70   |   |
| 315 | 22mm Tee                                                                                                                                                                                                                                                                                             | No | 70   |   |
| 316 | 22mm Female to female couplings                                                                                                                                                                                                                                                                      | No | 70   |   |
|     | <b><u>Extra over copper pipes for soldered capillary fittings:</u></b>                                                                                                                                                                                                                               |    |      |   |
| 317 | 15mm Fittings                                                                                                                                                                                                                                                                                        | No | 308  |   |
| 318 | 22mm Fittings                                                                                                                                                                                                                                                                                        | No | 210  |   |
| 319 | Allow for soccer pitch irrigation complete system as a P-Sum amount<br>Workshop drawings for the soccer pitch irrigation system                                                                                                                                                                      |    | Item |   |
| 320 | Technical submittals for approval of the irrigation system                                                                                                                                                                                                                                           |    | Item |   |
| 321 | As-built drawings for the soccer pitch irrigation system                                                                                                                                                                                                                                             |    | Item |   |
|     | <b>Carried Forward</b>                                                                                                                                                                                                                                                                               |    |      | R |
|     | Section No. 5<br>Bill No. 1<br>MECHANICAL                                                                                                                                                                                                                                                            |    |      |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                                        |                                                                                                                                 |    |      | R |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----|------|---|
| <b><u>Cold Water Supply</u></b>                                        |                                                                                                                                 |    |      |   |
| <b><u>Class O hard drawn copper pipes complying with SABS 460</u></b>  |                                                                                                                                 |    |      |   |
| 322                                                                    | 15mm Diameter pipe                                                                                                              | m  | 345  |   |
| 323                                                                    | 15mm Bend                                                                                                                       | No | 210  |   |
| 324                                                                    | 15mm Tee                                                                                                                        | No | 210  |   |
| 325                                                                    | 15mm Female to female couplings                                                                                                 | No | 210  |   |
| <b><u>Extra over copper pipes for soldered capillary fittings:</u></b> |                                                                                                                                 |    |      |   |
| 326                                                                    | 15mm Fittings                                                                                                                   | No | 8    |   |
| 327                                                                    | Allow for soccer pitch irrigation complete system as a P-Sum amount<br>Workshop drawings for the soccer pitch irrigation system |    | Item |   |
| 328                                                                    | Technical submittals for approval of the irrigation system                                                                      |    | Item |   |
| 329                                                                    | As-built drawings for the soccer pitch irrigation system                                                                        |    | Item |   |
| <b><u>Class O hard drawn copper pies complying with SABS 460</u></b>   |                                                                                                                                 |    |      |   |
| 330                                                                    | SportFields Irrigation as provisional sum                                                                                       |    | Item |   |
| <b>Carried to Final Summary</b>                                        |                                                                                                                                 |    |      | R |
| Section No. 5<br>Bill No. 1<br>MECHANICAL                              |                                                                                                                                 |    |      |   |

# CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Item No |                                                                                     | Quantity | Rate | Amount |
|---------|-------------------------------------------------------------------------------------|----------|------|--------|
|         | <b><u>SECTION 4</u></b>                                                             |          |      |        |
|         | <b><u>BILL NO.1</u></b>                                                             |          |      |        |
|         | <b><u>PROVISIONAL SUM</u></b>                                                       |          |      |        |
|         | <b><u>SUPPLEMENTARY PREAMBLES</u></b>                                               |          |      |        |
|         | <b><u>Burglar proofing</u></b>                                                      |          |      |        |
| 1       | Provide the sum of R900, 000 ( Nine Hundred Thousand Rands) for burglar proofing    | Item     |      |        |
| 2       | Allow for profit                                                                    | Item     |      |        |
| 3       | Allow for attendance                                                                | Item     |      |        |
|         | <b><u>Electrical</u></b>                                                            |          |      |        |
| 4       | Provide the sum of R30, 000 (Thirty Thousand Rands) for additional electrical works | Item     |      |        |
| 5       | Allow for profit                                                                    | Item     |      |        |
| 6       | Allow for attendance                                                                | Item     |      |        |
|         | <b><u>Signage</u></b>                                                               |          |      |        |
| 7       | Provide the sum of R650 000.00 (Six Hundred and Fifty Thousand Rands) for signage   | Item     |      |        |
| 8       | Allow for giving every facility to Specialists as described                         | Item     |      |        |
| 9       | Allow for profit on above if required                                               | Item     |      |        |
|         | <b><u>Blinds</u></b>                                                                |          |      |        |
| 10      | Provide the sum of R 400 000.00 (Four Hundred Thousand Rands) for blinds            | Item     |      |        |
| 11      | Allow for giving every facility to Specialists as described                         | Item     |      |        |
| 12      | Allow for profit on above if required                                               | Item     |      |        |
|         | <b>Carried Forward</b>                                                              |          | R    |        |
|         | Section No. 6                                                                       |          |      |        |
|         | Bill No. 1                                                                          |          |      |        |
|         | PROVISIONAL SUMS                                                                    |          |      |        |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

|    | Brought Forward                                                             |      | R |
|----|-----------------------------------------------------------------------------|------|---|
|    | <b><u>Handrails</u></b>                                                     |      |   |
| 13 | Provide the sum of R800 000.00 (Eight Hundred Thousand Rands) for handrails | Item |   |
| 14 | Allow for giving every facility to Specialists as described                 | Item |   |
| 15 | Allow for profit on above if required                                       | Item |   |
|    | <b><u>Equipment</u></b>                                                     |      |   |
| 16 | Provide the sum of R3 000 000.00 (Three Million Rands) for equipment        | Item |   |
| 17 | Allow for giving every facility to Specialists as described                 | Item |   |
| 18 | Allow for profit on above if required                                       | Item |   |
|    | <b><u>Soccer Field</u></b>                                                  |      |   |
| 19 | Provide the sum of R15 000 000.00 (Fifteen Million Rands) for soccer field  | Item |   |
| 20 | Allow for giving every facility to Specialists as described                 | Item |   |
| 21 | Allow for profit on above if required                                       | Item |   |
|    | <b><u>Furniture</u></b>                                                     |      |   |
| 22 | Provide the sum of R2 000 000.00 (Two Million Rands) for furniture          | Item |   |
| 23 | Allow for giving every facility to Specialists as described                 | Item |   |
| 24 | Allow for profit on above if required                                       | Item |   |
|    | <b><u>Joinery Fittings</u></b>                                              |      |   |
| 25 | Provide the sum of R3 000 000.00 (Three Million Rands) for joinery fittings | Item |   |
|    | <b>Carried Forward</b>                                                      |      | R |
|    | Section No. 6                                                               |      |   |
|    | Bill No. 1                                                                  |      |   |
|    | PROVISIONAL SUMS                                                            |      |   |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

| Brought Forward                                   |                                                                                                                                | R    |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------|
| 26                                                | Allow for giving every facility to Specialists as described                                                                    | Item |
| 27                                                | Allow for profit on above if required                                                                                          | Item |
| <b><u>BOREHOLE</u></b>                            |                                                                                                                                |      |
| 28                                                | Allow R2, 250, 000 (Two Million, Two Hundred and Fifty Thousand Rands) for Borehole                                            | Item |
| 29                                                | Allow for Profit                                                                                                               | Item |
| 30                                                | Allow for attendance                                                                                                           | Item |
| <b><u>LANDSCAPING</u></b>                         |                                                                                                                                |      |
| 31                                                | Allow 4, 500, 000 (Four Million, Five Hundred Thousand Rands) for Landscaping                                                  | Item |
| 32                                                | Allow for Profit                                                                                                               | Item |
| 33                                                | Allow for attendance                                                                                                           | Item |
| <b><u>BUDGETARY ALLOWANCES</u></b>                |                                                                                                                                |      |
| <b><u>Community Liason Officer</u></b>            |                                                                                                                                |      |
| 34                                                | Provide the sum of R500 000 (Five Hundred Thousand Rands)                                                                      | Item |
| <b><u>Contract Price Adjustment Provision</u></b> |                                                                                                                                |      |
| 35                                                | Provide the sum of R7 625 000 (Seven Million, Six Hundred and Twenty-Five Thousand Rands) for CPAP (Contract Price Adjustment) | Item |
| <b>Carried to Final Summary</b>                   |                                                                                                                                | R    |
| Section No. 6                                     |                                                                                                                                |      |
| Bill No. 1                                        |                                                                                                                                |      |
| PROVISIONAL SUMS                                  |                                                                                                                                |      |

## CONSTRUCTION OF JTG SCHOOL- PHASE 2B

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