

ANNEXURE A: BILL OF QUANTITIES

| | HLUHLUWE GAME RESERVE - MPIL ELECTRICAL RETICULATION | | <u></u> | | | |
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| ITEM NO. | DESCRIPTION | UNIT | FIXED | VALUE | TIME | AMOUNT |
| | SECTION 1 - PRELIMINARIES | | | | | |
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| 1 | BILL NO 1 PRELIMINARIES | | | | | |
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| | BUILDING AGREEMENT AND PRELIMINARIES | | | | | |
| | The JBCC Minor Works Agreement (Edition 5.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described | | | | | |
| | The JBCC Minor Works Agreement contract data form an integral part of this agreement | | | | | |
| | The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Minor Works Agreement (Edition 5.2 - May 2018) shall be deemed to be incorporated in these bills of quantities, amended as hereinafter described | | | | | |
| | The contractor is deemed to have referred to the above mentioned documents for the full intent and meaning of each clause | | | | | |
| | The relevant clauses in the abovementioned documents are hereinafter referred to by clause number and heading only | | | | | |
| | Where any item is not relevant to this agreement such item is marked N/A signifying "not applicable" | | | | | |
| | Where standard clauses or alternatives are not entirely applicable to this agreement such amendments, modifications, corrections or supplements as will apply are given under each relevant clause heading and such amendments, modifications | | | | | |
| | amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the above mentioned documents | | | | | |

| ITEM NO. | DESCRIPTION | UNIT | FIXED | VALUE | TIME | AMOUNT |
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| | PREAMBLES FOR TRADES | | | | | |
| | PREAMBLES FOR TRADESThe Model Preambles for Trades(2008 Edition) published by theAssociation of South African QuantitySurveyors shall be deemed to beincorporated in this Project SpecificPreliminaries and no claims arisingfrom brevity of description of itemsfully described in the said GeneralPreambles will be entertainedSupplementary preambles and/orspecifications are incorporated inthese bills of quantities to satisfy therequirements of this project. Suchsupplementary preambles and/orspecifications shall take precedenceover the provisions of the GeneralPreamblesThe contractor sum shall take accountof and include where applicable for allof the obligations, requirements and | | | | | |
| | specifications given in the General Preambles and in any supplementary preambles and/or specifications | | | | | |
| | STRUCTURE OF THIS PRELIMINARIES BILL | | | | | |
| | Section A: Amendments, modifications, corrections or supplements to the aforementioned JBCC Minor Works Agreement | | | | | |
| | Section B: Amendments, modifications, corrections or supplements to the aforementioned JBCC General Preliminaries | | | | | |
| | Section C: Any special clauses to meet the particular circumstances of the project | | | | | |
| | PRICING OF PRELIMINARIES | | | | | |
| | Should the contractor select Option A in the contract data for the adjustment of preliminaries, the amounts entered against the relevant items in these preliminaries are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T) | | | | | |
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| SECTION A: MINOR WORKS AGREEMENT | | | |
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| Interpretation (A1-A7) | | | |
| Clause 1.0 - Definitions and | | | |
| interpretation | | | |
| Contract sum | | | |
| The contract sum to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement. Value Added Tax (VAT) is | | | |
| to be separately stated in the contract data | | | |
| The contract sum shall include for all construction equipment, temporary works, services and other items and shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary | | | |
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| Pricing of bills of quantities | | | |
| The contractor is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement. Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities | | | |
| Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the contractor's omission to price any item will be entertained | | | |

| Prices for all construction equipment, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary | | | |
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| Abbreviated descriptions | | | |
| The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the Principal Agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice | | | |
| Legal status of contractor | | | |
| If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then: | Item | | |
| 1. These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement | | | |
| 2. These persons shall notify the employer of their leader who has assigned authority to bind the contractor and each of these persons | | | |
| 3. The contractor shall not alter its composition or legal status without the prior written consent of the employer | ltor | | |
| Clause 2.0 - Law, regulations and notices | Item | | |
| Clause 3.0 - Offer, acceptance and assignment | Item | | |
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| | Clause 4.0 – Documents Value Added Tax | | | |
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| | Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT) | Item | | |
| | Priced document as specification | | | |
| | Clause 4.3 is deemed to be deleted | | | |
| | The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any | | | |
| | Electronic issue of drawings | | | |
| | All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically [4.5] | | | |
| 1.1 | Clause 5.0 - Employer's agents | Item | | |
| | | | | |
| | Delegated authority | | | |
| | The authority of the principal agent to issue contract instructions [14.1] and perform duties for specific aspects of the works is delegated to agents as follows [5.2]. This does not preclude the principal agent from issuing such contract instructions: | | | |
| | 1. Engineer | | | |
| | 1.1 Duties [5.2]: | | | |
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| | The engineer is responsible for the electrical engineer design, functional design and quality inspection of the works | Item | | | |
| | 1.2 Contract instructions [5.2; 14.1]: | | | | |
| | 1.2.1 Rectification of discrepancies, errors in description or quantity or omissions of items in this agreement other than in the JBCC Minor Works Agreement | | | | |
| | 1.2.2 Alteration to design, quality or quantity of the works provided that such contract instructions shall not substantially change the scope of the works | | | | |
| | 1.2.3 The site [12.0] | | | | |
| | 1.2.4 Compliance with the law, regulations and bylaws [2.1] | | | | |
| | 1.2.5 Provision and testing of samples of materials and goods and/or finishes or assemblies of elements of the works | | | | |
| | 1.2.6 Opening up of work for inspection, removal or re-execution | | | | |
| | 1.2.7 Removal or re-execution of work | | | | |
| | 1.2.8 Removal or substitution of any materials and goods | | | | |
| | 1.2.9 Protection of the works | | | | |
| | 1.2.10 Making good physical loss and repairing damage to the works [17.2.2] | | | | |
| | 1.2.11 Rectification of defects [16.4; 16.8] | | | | |
| | 1.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion | | | | |
| | 1.2.13 Expenditure of employer allowances | | | | |
| | and/or prime cost amounts 1.2.14 Work by direct contractors [13.0] | | | | |
| | | | | | |
| | 1.2.15 On suspension or termination, protection of the works, removal of construction equipment and surplus materials and goods [21.6.1] | | | | |
| | Insurances and securities (A9, A0) | | | | |
| | Insurances and securities (A8-A9) | 14 - 1 | | | |
| | Clause 8.0 - Risks, indemnities and insurances | Item | | | |
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| Clause 9.0 - Securities | | Brought Forward from Previous Page | | | | |
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| 1.3 Guarantee for payment Item | | | 1 | | 1 | |
| 1.3 Guarantee for payment Item | | | | | | |
| The Employer shall not provide to the contractor with a guarantee for payment By virtue of the contractor submitting a tender offer, he is deemed to have waived his lien or right of continuing possession of the works [9.2] Sub-clause 9.2 has been amended to read as follows: The contractor shall waive his lien or right of continuing possession of the works." Extension of waiver of lien The contractor shall ensure that a waiver of lien or right of continuing possession of the works is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [9.2] Execution (A10 - A14) Clause 10.0 - Obligations of the contractor Office accommodation 1.4 The contractor shall ensure (main and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [11.2.5] Notice board The contractor shall erect in a position approved by the principal agent lising the names and logos of the employer, the contractor or supplier notice board secommended by the principal agent lising the names and logos of the employer, the contractor and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for | | | | | | |
| with a guarantee for payment By virtue of the contractor submitting a tender offer, he is deemed to have waived his lien or right of continuing possession of the works [9.2] Image: Sub-clause 9.2 has been amended to read as follows: "The contractor shall waive his lien or right of continuing possession of the works." Image: Sub-clause 9.2 has been amended to read as follows: "The contractor shall ensure that a waiver of lien or right of continuing possession of the works is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [9.2] Image: Sub-clause 10.0 - Obligations of the employer Clause 10.0 - Obligations of the contractor Item Item Office accommodation Item Image: Sub-clause 11.0 - Obligations of the contractor 1.4 The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [11.2.5] Image: Sub-clause 11.0 - Sub-clause 11.0 - Sub-clause 11.2.5] Motice board Image: Sub-clause 11.0 - Sub-clause 11.0 - Sub-clause 11.0 - Sub-clause 11.2.5] Image: Sub-clause 11.0 - Sub-cl | 1.3 | | Item | | | |
| right of continuing possession of the works." | | with a guarantee for payment By virtue of the contractor submitting a tender offer, he is deemed to have waived his lien or right of continuing possession of the works [9.2] | | | | |
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| Clause 10.0 - Obligations of the employer Item Clause 11.0 - Obligations of the contractor Item Office accommodation Item 1.4 The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [11.2.5] Item Notice board Notice board Item practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor or supplier notice boards may be erected unless permission is granted by the principal agent fo | | right of continuing possession of the works is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [9.2] | | | | |
| Clause 11.0 - Obligations of the contractor Item Office accommodation Item 1.4 The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [11.2.5] Item Notice board Item The contractor shall erect in a position approved by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor or supplier notice boards may be erected unless permission is granted by the principal agent for | | | | | | |
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| 1.4 The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [11.2.5] Item Notice board Item Notice board Item Notice board Item Notice board Item Notice board Item by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for | | Office accommodation | | | | |
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| Image: Sector of the sector | | by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for | Item | | | |
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| Statutory and other notices | | | |
| The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor. The contractor shall pay | | | |
| all deposits or fees in this regard | | | |
| It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto | | | |
| Clause 12.0 - Setting out | ltem | | |
| Clause 13.0 - Direct contractors | Item | | |
| Attendance on direct contractors | | | |
| | | | |
| In respect of direct contractors the contractor shall: | | | |
| 1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials | | | |
| 2. Allow the use of personnel welfare facilities, where provided | | | |
| 3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation | | | |
| 4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [13.1] | | | |
| Clause 14.0 - Contract instructions | Item | | |
| Site instructions | | | |
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| | Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor | | | | |
| | Completion (A15 - A18) | | | | |
| 1.5 | Clause 15.0 - Practical completion | Item | | | |
| 1.6 | Clause 16.0 - Defects liability period and final completion | Item | | | |
| | | | | | |
| 1.7 | Clause 17.0 - Revision of the date for practical completion | Item | | | |
| | Substitution of materials and goods | | | | |
| | The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [14.1.8; 17.1 & 2] | | | | |
| 1.8 | Clause 18.0 - Penalty for late or non-completion | Item | | | |
| | | | | | |
| | Payment (A19 - A20) | | | | |
| | Clause 19.0 - Payment | Item | | | |
| | Prices submitted | | | | |
| | | | | | |
| | Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing | | | | |
| | Clause 20.0 - Adjustment of the contract value and final account | Item | | | |
| | Cost of claims | | 1 | | |
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| | All costs incurred by the contractor in the preparation of claims shall be borne by the contractor. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [22.5 & 6] from making a determination on costs | | | | |
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| Agreement | | | |
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| The required information of the parties and the amount of the contract sum shall be inserted in the agreement for signature of the agreement by the parties | Item | | |
| Contract data | | | |
| Tenderer's selections | | | |
| Before submission of his Tender the contractor is to complete the Tenderer's selections in the contract data | Item | | |
| SECTION B: GENERAL PRELIMINARIES | | | |
| | - | | |
| Definitions and interpretation (B1) Clause 1.1 - Definitions | ltom | | |
| | Item | | |
| Clause 1.2 - Interpretation | Item | | |
| | | | |
| Documents (B2) | 14 0 100 | | |
| Clause 2.1 - Checking of documents | Item | | |
| Clause 2.2 - Provisional bills of quantities | Item | | |
| Clause 2.3 - Availability of construction information | Item | | |
| Clause 2.4 - Ordering of materials and goods | Item | | |
| Previous work and adjoining properties (B3) | | | |
| Clause 3.1 - Previous work - dimensional accuracy | Item | | |
| Clause 3.2 - Previous work - defects | Item | | |
| Clause 3.3 - Inspection of adjoining properties | ltem | | |
| | | | |
| The site (B4) | ltom | | |
| Clause 4.1 - Handover of site in stages Clause 4.2 - Enclosure of the works | Item | | |
| Clause 4.2 - Enclosure of the works | Item | | |
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| Clause 4.3 - Geotechnical and other investigations | Item | | |
| Clause 4.4 - Encroachments | Item | | |
| Clause 4.5 - Existing premises occupied | Item | | |
| Clause 4.6 - Services - known | Item | | |
| Management of contract (B5) | | | |
| Clause 5.1 - Management of the works | Item | | |
| Clause 5.2 - Progress meetings | Item | | |
| Clause 5.3 - Technical meetings | Item | | |
| | | | |
| Samples, shop drawings and manufacturer's instructions (B6) | | | |
| Clause 6.1 - Samples of materials All material samples and colour samples must be submitted to the Principal Agent for selections and approval of the colour, shape and finish including mechanical, electrical and plumbing equipment that will be visible. The samples shall be provided in A4 size unless otherwise agreed. General samples shall be provided for Principal Agent/Employer to choose from each type of finish The Principal Agent/Employer may reject all or part of the submitted samples and request for additional selections if the first submission are not acceptable All samples must be kept in a sample room to be provided by the contractor for reference Sample Board: The contractor shall provide a board(s) of approved samples and make available one set at the site (sample room) and one for the Employer Clause 6.2 - Workmanship samples Clause 6.3 - Shop drawings Clause 6.4 - Compliance with manufacturer's | Item Item | | |
| instructions | | | |
| Deposits and fees (B7) | | | |
| Clause 7.1 - Deposits and fees | Item | | |
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| Temporary services (B8) | | | | |
| Clause 8.1 - Water | Item | | | |
| Clause 8.2 - Electricity | Item | | | |
| Clause 8.3 - Ablution and welfare facilities | Item | | | |
| Clause 8.4 - Communication facilities | Item | | | |
| Prime cost amounts (B9) | | | | |
| Clause 9.1 - Responsibility for prime cost | Item | | | |
| amounts | | | | |
| Prime cost amounts | | | | |
| The contractor shall allow in the contract sum for the stated prime cost amounts and for overheads and profit and for taking delivery, unloading, checking against invoices and/or delivery notes, getting in, unpacking, storing, hoisting and fixing of such materials and goods | | | | |
| Attendance on subcontractors (B10) | | | | |
| Clause 10.1 - General attendance | Item | | | |
| Clause 10.2 - Special attendance | Item | | | |
| Clause 10.2 - Opecial attendance | nem | | | |
| General (B11) | | | | |
| Clause 11.1 - Protection of the works | Item | | | |
| Clause 11.2 - Protection/isolation of existing | Item | | | |
| works and works occupied in sections | nem | | | |
| Clause 11.3 - Security of the works | Item | | | |
| Clause 11.4 - Notice before covering work | Item | | | |
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| Clause 11.5 - Disturbance | | | | |
| Disturbance | 1 | 1 | 1 | 1 |

| All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever | Item | | | |
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| Clause 11.6 - Environmental disturbance | | | | |
| Controlling all forms of pollution | Item | | | |
| The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due inter alia to noise, artificial light, wind-blown sand, dust, deposits of mud, etc | | | | |
| The contractor is to ensure that all roads which border the site and are used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works | | | | |
| Clause 11.7 - Works cleaning and clearing | Item | | | |
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| SECTION C: SPECIFIC PRELIMINARIES | | | | |
| Warranties for materials and workmanship | Item | | | |
| Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract | | | | |
| The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so | | | | |
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| is w | he warranty will not be enforced if the work damaged by defects in the execution of the rorks, in which case the responsibility for eplacement shall rest entirely with the | | | | | |
| 0 | ontractor overtime hould overtime be required to be worked for | Item | | | | |
| ai oʻ ui ai co | ny reason whatsoever, the cost of such vertime is to be borne by the contractor nless the principal agent has specifically uthorised, prior to execution thereof, that osts for such overtime are to be borne by ne employer | | | | | |
| | cooperation of the contractor for cost | | | | | |
| lt ac pi m by e | nanagement is specifically agreed that the contractor ccepts the obligation of assisting the rincipal agent in implementing proper cost nanagement. The contractor will be advised y the principal agent of all cost management rocedures which will be implemented to nsure that the contract value does not xceed the budget | Item | | | | |
| 0 | Verloading | | | | | |
| T tc or te cr pi tc pi tc pi tc si w | he contractor shall take all necessary steps o ensure that no damage occurs due to verloading of any portion of the works or emporary works eg scaffolding, etc. The ontractor shall submit details of his roposed loading, storage, plant erection, etc o the principal agent for approval prior to roceeding with such loading, storing or recting and shall comply with and pay for ne principal agent's requirements in onnection with the provision of temporary upport work, etc. Any damage caused to the rorks by overloading shall be made good by ne contractor at his sole expense | Item | | | | |
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| Health and safety | | | |
| Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [2.1] | Item | | |
| The contractor shall: | Item | | |
| | | | |
| 1. Comply with the health and safety specification for the works | | | |
| 2. Prepare and agree with the health and | | | |
| safety consultant the health and safety plan for the works | | | |
| 3. Cooperate with the health and safety consultant in all respects | | | |
| 4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification | | | |
| 5. Conform to the conditions contained in the employer's health and safety specification | | | |
| Broad based black economic empowerment (BBBEE) | Item | | |
| Tenders submitted will be evaluated taking into account their empowerment rating | | | |
| The employer will be monitoring the broad based black economic empowerment (BBBEE) status of the contractor throughout the execution of the works | | | |
| The contractor is to submit to the principal agent on an annual basis a schedule of spend, split into vendors engaged as subcontractors and suppliers indicating their BBBEE rating including proof of the said rating | | | |
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| Advertising rights | | | |
| The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. The position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in meeting his obligations under this agreement | Item | | |
| Confidentiality | Item | | |
| The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works No information regarding this project shall be published or disclosed without the prior written consent of the employer | | | |
| Madia palagaga | ltare | | |
| Media releases All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer | Item | | |
| The contractor together with his subcontractors shall not, without the prior written consent of the employer, cause any statement or advertisement connected with this project to be printed, screened or aired by the media | | | |
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| Total for Preliminaries carried to Final Summary | | | |

HLUHLUWE GAME RESERVE - MPILA CAMP: ELECTRICAL RETICULATION

| ITE | DESCRIPTION | UNIT | QNTY | RATES | AMOUNT | |
|----------|---|------|------|--------|---------|--|
| M NO. | | | | Supply | Install | |
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| | SECTION NO. 2: | | | | | |
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| | STANDARD PREAMBLES | | | | | |
| | The Tenderer is referred to the "Model Preambles for Trades (2008 Edition) and the Supplementary Preambles" and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates | | | | | |
| | SUPPLEMENTARY PREAMBLES | | | | | |
| | View site: | | | | | |
| | Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained | | | | | |
| | General Notes: | | | | | |
| | The contractor shall carry out the whole of the works with as little mess and noise as possible and with minimum disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent. | | | | | |
| | Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent. Making good of finishes shall include | | | | | |
| | making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary. | | | | | |
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| | ELECTRICAL INSTALLATION / WORKS (PROVISIONAL) | | | | |
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| | The Tenderer is referred to the relevant Clauses in the Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities. | | | | |
| 2 | ELECTRICAL DISTRIBUTION KIOSKS & DISTRIBUTION BOARDS | | | | |
| 2.1 | DISTRIBUTION KIOSK | | | | |
| 2.1.1 | Floor standing 3CR12 outdoor kiosk with neutral busbars, earth bar and cocrete plinth and all accessories including the following switchegear: | No. | 1 | | |
| | - 60A, 6kA TP Isolator (Main Switch) | No. | 1 | | |
| | - 60A, 6kA SP circuit breaker (3 x Existing Parkhomes + 1 x Future Kitchen) | No. | 4 | | |
| | - 30A, 6kA SP circuit breaker (1 x Existing + 1 x Future Ablutions with showers) | No. | 2 | | |
| | - Class 1 4 pole 40kA surge protection device | No. | 1 | | |
| 2.1.2 | Surface mounted 3CR12 distribution board for the Existing Toilet (position to be determined on site) with the follwing switchgear: | No. | 1 | | |
| | - 30A, 6kA SP Isolator (Main Switch) | No. | 1 | | |
| | - 10A, 6kA SP ciruit breaker | No. | 2 | | |
| 2.2 | DISTRIBUTION BOARDS - EXISTING WALL MOUNTED NEXT TO 85kVA GENERATOR | | | | |
| 2.2.1 | Complete refurbish the existing semi- recessed outdoor distribution boards (DB's), supplying missing distribution board doors, load / phase balancing install missing labelling and legend cards. | Item | 1 | | |
| 2.2.2 | Add 1 x 60A 6kA TP circuit breaker | No. | 1 | | |
| 2.2.3 | Load profiling / testing for on two existing main DB's (for 100kVA and 85kVA standby generator) for <u>24 hours for 7</u> <u>days including weekends</u> to determine the current power / electricity consumption, spare capacity and confirm phase / load balancing using . | Item | 1 | | |
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| .3 | DISTRIBUTION BOARDS - EXISTING 6- ROOM PARK HOMES | | | | |
|-------|---|------|---|---|------|
| 2.3.1 | Complete refurbish the existing semi- recessed outdoor distribution boards (DB's), supplying missing distribution board doors, install missing labelling and legend cards, missing circuit breakers. The DB covers to be properly sealed to prevent water ingress. The loose neutral bars must be fixed, DB's must be cleaned, remove dirt and dust. | Item | 1 | | |
| | The existing DB's are wired as follows. | | | | |
| | | | | | |
| | - 40A DP Isolator (main switch) | | | | |
| | - 63A DP, 30mA ELU | | | | |
| | - 1 x 20A SP Plugs | | | | |
| | - 1 x 10A SP Lights | | | | |
| | - 6 x 20A Air-conditioners | | | | |
| | | | | | |
| | The existing DB's must be rewired as follows using the above-mentioned circuit breakers. | | | | |
| | - 40A DP Isolator (main switch) | | | | |
| | - 63A DP, 30mA ELU | | | | |
| | - 3 x 20A SP Plugs | | | | |
| | - 1 x 10A SP Lights | | | | |
| | - 3 x 20A SP (Spares) | | | | |
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| 3 | GENERAL LIGHTING AND EQUIPMENT | | | | |
|-------|---|------|----|------|--|
| 3.1 | LUMINAIRES | | | | |
| | Luminaires must be delivered with lamps packed separately. Luminaries or equipment installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections, LED modules and drivers: For Types, see below: | | | | |
| 3.1.1 | Remove the existing 58W open channel luminaire. They must be handed over to the Client (Ezemvelo KZN Wildlife). They must be replaced with the following luminaires (light fittings): | Item | 1 | | |
| 3.1.2 | MIKRO CEILING FAN WITH LIGHT WHITE with 7W LED lamp, Fitting Material : Steel & Wood, Shade Lens Material : Glass, Colour : White; Shade Lens Colour : Opal; IP Rating : 20; 3 speed winter and summer switch Dual cycle | No. | 18 | | |
| 3.1.3 | 10W, 5V LED Exterior solar rechargeable flood with ABS and Aluminium body and Polycarbonate diffuser built-in motion sensor, freestanding solar panel including. They must be installed above the existing distribution boards. | No. | 6 | | |
| 3.1.4 | 37W LED surface mounted corrosion / vapour proof protected luminaire, self-extinguishing polycarbonate body, UV stabilised self- extinguishing polycarbonate diffuser with photo-engraved interior and smooth outer surface anti-tamper multiple sprung stainless steel snap-lock latches (for per side) to ensure the integrity of the IP65 rating, hinge-able gear tray, M20 gland at one end with a knock out at the opposite end complete with mounting accessories | No. | 2 | | |
| | Freestanding solar panel included. | | | | |
| 3.2 | Conduit PVC (SANS 950) conduit chased into brickwork, cast into concrete or fixed onto trusses including cutting, bending, saddles, bushes, etc. | | | | |
| 3.2.1 | 20mm | m | 20 | | |
| | | | | | |
| 3.3 | Conduit Boxes | | | | |
| 3.3.1 | Round box for 20mm conduit, back or side entry for 1, 2, 3 or 4-way chased into brickwork, cast into concrete or fixed onto trusses including couplings bushes cover plates and fixing materials | No. | 6 | | |
| 3.3.2 | Galvanised steel, 100 x 50 x 50mm box for 20mm conduit built into brickwork or cast in concrete. (cover plates measured elsewhere) | No. | 2 | | |
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| 3.4 | Equipment and Control Gear | | | | |
| | 16 Amp rocker type light switch with coverplate installed into a flush box (box measured elsewhere) | | | | |
| 3.4. 1 | Rotary switch weatherproof | No. | 2 | | |
| 3.5 | Conductors: 600/1000 grade PVC insulated single core copper conductors | | | | |
| 3.5. 1 | 2,5mm ² red/black | m | 100 | | |
| 3.5. 2 | 4mm ² PVC black and red | m | 100 | | |
| 3.5. 3 | 2,5mm ² red/black/Yellow-Green | m | 100 | | |
| 3.6 | Equipment and Control Gear | | | | |
| | Surface mounted 16 Amp 3 pin switched socket outlets with cover plates (Boxes measured elsewhere), Contractor to use existing wireways surface mounted wireways of chasing the panel will be permitted. | | | | |
| 3.6. 1 | Remove the existing switched socket outlets. They must be handed over to the Client (Ezemvelo KZN Wildlife). They must be replaced with the following with the following: | Item | 1 | | |
| 3.6. 2 | Surface mounted double switched socket outlets: 2 x SANS164-1 + 2 x SANS 164-2 switched on yoke, Crabtree Classic Quattro | No. | 18 | | |
| 3.6. 3 | Remove the existing air-conditioning switches and make good. They must be handed over to the Client (Ezemvelo KZN Wildlife). | Item | 1 | | |
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| | TOTAL BILL No.3 CARRIED TO PRICE SUMM | IARY P | AGE | - | |

| 4 | CABLING AND CABLE SLEEVES | | | | |
|---------|---|----------------|-----|--|-----------|
| | | | | | |
| 4.1 | LV Cabling Multicore ECC PVCSWAPVC cable with stranded copper conductors to SANS 1507-3 drawn into cable sleeves, installed on cable trays/ladders or laid in open trenches and ducts | | | | |
| 4.1.1 | Remove the existing cables from the park home existing distributions to the bottom of the park homes. They must be handed over to the Client (Ezemvelo KZN Wildlife). They must be replaced with the following cables: | Item | 1 | | |
| 4.1.2 | 16mm ² x 4 Core | m | 150 | | |
| 4.1.3 | 10mm ² x 2 Core | m | 1 | | Rate Only |
| 4.1.4 | 6mm ² x 2 Core | m | 170 | | |
| 4.1.5 | 4mm ² x 2 Core | m | 40 | | |
| 4.2 | LV Cable Terminations for | | | | |
| 4.2.1 | 16mm ² x 4 Core | No. | 2 | | |
| 4.2.2 | 10mm ² x 2 Core | No. | 1 | | Rate Only |
| 4.2.3 | 6mm ² x 2 Core | No. | 6 | | |
| 4.2.4 | 4mm ² x 2 Core | No. | 2 | | |
| | | | | | |
| 4.3 | LV Trenching | | | | |
| 4.3.1 | Cut the existing brickwork by 100mm deep, install 32mm diameter sleeve including 90 deg slow bend and install chicken mesh on top of the sleeve and re-plaster and make good. POOR WORKMANSHIP WILL NOT BE ACCEPTED. | Item | 1 | | |
| 4.3.2 | Excavation 600mm deep x 400mm wide including backfilling and compacting | | | | |
| 4.3.2.1 | In earth | m | 350 | | |
| 4.3.2.2 | Soft rock EXTRA OVER earth | m ³ | 10 | | |
| 4.3.2.3 | Hard rock EXTRA OVER earth | m ³ | 5 | | |
| 4.3.2.4 | Selected fines bedding 150mm under cable and 150mm on top of cable (when required by soil condituions) | m ³ | 5 | | |
| 4.3.2.5 | LV Cable marker tape laid in an open trench and 150mm above a cable 150mm wide 800 gauge cable marker tape. | m | 350 | | |
| 4.3.2.6 | 5mm nylon drawn cable drawn into spare sleeves | m | 50 | | |
| 4.3.2.7 | 250mm High trancated pyramid cable route marker with stainless steel insert engraved with the cable dedails eg, "LV 25mm ² 4C CABLE". installed to protrude 150mm above ground and every 35m along and at the cable route direction change. | No. | 6 | | |
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| 4.4 | LV Cable Sleeves & Bends | | | | |
| | Corrugated (Kabelflex) cable sleeve laid in open trench including cutting and joining | | | | |
| | NOTE: Spare sleeves for future use to be sealed at both ends | | | | |
| 4.4. 1 | 32mm diameter | m | 50 | | |
| 4.4. 2 | 90 degrees slow bends for 32mm dia. Sleeve | No. | 10 | | |
| 4.5 | Label cables on both ends with numbering beads or non-corroding straps to indicate their connection points | Item | 1 | | |
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| 5 | SUNDRY ITEMS | | | | |
|-----|--|------|------|--|--|
| 5.1 | Earthing and bonding of the building installation | Item | 1 | | |
| 5.2 | Test the completed electrical installation including load / phase balancing and issue Certificate of Compliance (CoC). | Item | 1 | | |
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| HLUHLUWE GAME RESERVE MPILA CAMP-ELECTRICAL RETICULATION | | |
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| PRICE | SUMMARY PAGE | |
| ITEM NO. | DESCRIPTION | AMOUNT |
| 1 | PRELIMINARY & GENERAL | |
| 2 | ELECTRICAL DISTRIBUTION KIOSKS & DISTRIBUTION BOARDSS | |
| 3 | GENERAL LIGHTING AND EQUIPMENT | |
| 4 | CABLING AND CABLE SLEEVES | |
| 5 | SUNDRY ITEMS | |
| | SUBTOTAL | |
| | Add 10% Contingency | |
| | SUB - TOTAL | |
| | Add 15% VAT | |
| TOTAL | PRICE FOR ELECTRICAL INSTALLATION INCL. VAT | |