



REQUEST FOR QUOTATION (RFQ) (Civil Works)

DATE: March 9, 2020
REFERENCE: SWZ-RFQ-003-2020

Dear Sir / Madam:

We kindly request you to submit your quotation for Re-construction of Khelekhele Camp site , as detailed in Annex 1 of this RFQ. When preparing your quotation, please be guided by the form attached hereto as Annex 2.

Quotations may be submitted on or before March 25, 2020 and via ☒ *e-mail* to the e-mail address below:

Procurement.sz@undp.org

Quotations submitted by email must be limited to a maximum of 5MB, virus-free and no more than *[indicate number]* email transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

It shall remain your responsibility to ensure that your quotation will reach the address above on or before the deadline. Quotations that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your quotation by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Please take note of the following requirements and conditions pertaining to the supply of the abovementioned good/s:

Delivery Terms [INCOTERMS 2010] <i>(Pls. link this to price schedule)</i>	<input checked="" type="checkbox"/> DAP
Customs clearance, if needed, shall be done by:	N/A
Exact Address/es of Delivery Location/s (identify all, if multiple)	Khelekhele Camp site, Eswatini
UNDP Preferred Freight Forwarder, if any	N/A
Distribution of shipping documents <i>(if using freight forwarder)</i>	N/A
Latest Expected Delivery Date and Time <i>(if delivery time exceeds this, quote may be rejected by UNDP)</i>	<input checked="" type="checkbox"/> 6 months from the issuance of the contract for lots 1,2 & 3 And 2 months for Lot 4
Delivery Schedule	<input checked="" type="checkbox"/> Required
Packing Requirements	N/A
Mode of Transport	Up to the supplier.
Preferred Currency of Quotation	<input checked="" type="checkbox"/> Local Currency : Emalangeni
Value Added Tax on Price Quotation ¹	<input checked="" type="checkbox"/> Must be inclusive of VAT and other applicable indirect taxes Please quote the VAT in a separate line in the price schedule for each lot.
After-sales services required	<input checked="" type="checkbox"/> Warranty on Parts and Labor for minimum period of one year.
Deadline for the Submission of Quotation	COB, Wednesday, March 25, 2020 and at 04:00 pm Eswatini time zone
All documentations, including catalogs, instructions and	<input checked="" type="checkbox"/> English

¹ This must be reconciled with the INCO Terms required by the RFQ. Furthermore, VAT exemption status varies from one country to another. Pls. tick whatever is applicable to the UNDP CO/BU requiring the goods.

operating manuals, shall be in this language	
Site Visit	<p>Will be Conducted</p> <p>Time: 11:00 am</p> <p>Date : March 16, 2020 11:00 AM</p> <p>Venue : Khelekhele Camp site</p> <p>The UNDP focal point for the arrangement is:</p> <p>Name: Lindani Mavimbela</p> <p>Telephone: +268 76223532</p> <p>E-mail: mavimbela.l@sntc.org.sz</p>
Documents to be submitted	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Company Profile, which should <u>not</u> exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured; <input checked="" type="checkbox"/> Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if Bidder is not a corporation; or membership certificate in the Engineers or Contractors Association, or equivalent. <input checked="" type="checkbox"/> Official Letter of Appointment as local representative (which should be registered in Eswatini), if Bidder is submitting a Bid on behalf of an entity located outside the country. <input checked="" type="checkbox"/> Latest Audited Financial Statement (Income Statement and Balance Sheet) including Auditor's Report for the past three (3) years; <input checked="" type="checkbox"/> Statement of Satisfactory Performance from the Top Three (3) Clients in terms of Contract Value and related to similar nature and complexity to our project; <input checked="" type="checkbox"/> Time schedule in compliance with the deadlines set in the TOR. Detailed work plan including the project timeline and duration for the main activities, as well as method statements for the required works. The proposal shall be clear and comprehensive; <input checked="" type="checkbox"/> In case of subcontracting, the bidder should submit the company profile, experience and team composition of the designated subcontractor; <input checked="" type="checkbox"/> List and value of projects performed for the last 5 years with similar nature and complexity, plus client's contact details who may be contacted for further information on those contracts; <input checked="" type="checkbox"/> Technical description of materials, supply and equipment in line with or exceed the requirements of performance and size of the RFQ (for all components and/or requirements); <input checked="" type="checkbox"/> Proof that the contractor owns or will rent the proposed equipment; <input checked="" type="checkbox"/> CVs of the Key Staff (engineers, supervisors); <input checked="" type="checkbox"/> Guarantees: The complete works shall be tested, commissioned and handed over complete and in perfect operating condition and

	shall be covered under a defects liability (parts and labor) for a minimum period of 1 year from the date of commissioning, including any possible hidden defect.
Period of Validity of Quotes starting the Submission Date	<input checked="" type="checkbox"/> 60 days In exceptional circumstances, UNDP may request the Vendor to extend the validity of the Quotation beyond what has been initially indicated in this RFQ. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Quotation.
Partial Quotes	<input checked="" type="checkbox"/> Permitted by lot. (the vendors might quote for one or more lots)
Payment Terms	<ul style="list-style-type: none"> • 90% of each project phase will paid upon completion of each project phase infrastructural works on site supported by a job completion certificate or invoice with payment details. • 10% retention fee payable after evaluation and final receipt and acceptance by the supervision committee.
Liquidated Damages	<input checked="" type="checkbox"/> Will be imposed under the following conditions: Percentage of contract price per day of delay: 0.5% Max. no. of days of delay: 20 After which UNDP may terminate the contract.
Performance Security	Bank Performance Security is Required in the amount of 10% of contract value
Evaluation Criteria <i>[check as many as applicable]</i>	<input checked="" type="checkbox"/> Technical responsiveness/Full compliance to requirements and lowest price <input checked="" type="checkbox"/> Comprehensiveness of after-sales services <input checked="" type="checkbox"/> Technical capacity (staff, machinery, previous experience) are suitable to achieve the subject work. <input checked="" type="checkbox"/> Financial Capacity (annual turnover to be twice the bid value for each lot) <input checked="" type="checkbox"/> Full acceptance of the PO/Contract General Terms and Conditions <i>[this is a mandatory criteria and cannot be deleted regardless of the nature of services required]</i>
UNDP will award to:	<input checked="" type="checkbox"/> One or more Supplier, depending on the following factors: <i>[Each lot might be awarded to a different vendor based on the above evaluation criteria]</i>
Type of Contract to be Signed	Contract for Civil Works

	http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
Contract General Terms and Conditions	UNDP General Terms and Conditions for Works http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
Special conditions of Contract	<input checked="" type="checkbox"/> Cancellation of PO/Contract if the delivery/completion is delayed by 20 days
Conditions for Release of Payment	<input checked="" type="checkbox"/> Written Acceptance of works based on full compliance with ITB requirements
Annexes to this RFQ	<input checked="" type="checkbox"/> Terms of Reference and Bill of Quantity <input checked="" type="checkbox"/> Form for Submission of Quotation (Annex 2) <input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html Non-acceptance of the terms of the General Terms and Conditions (GTC) shall be grounds for disqualification from this procurement process.
Contact Person for Inquiries (Written inquiries only) ²	Hanan Al Ali Procurement Analyst Hanan.al-ali@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.

Goods offered shall be reviewed based on completeness and compliance of the quotation with the minimum specifications described above and any other annexes providing details of UNDP requirements.

The quotation that complies with all of the specifications, requirements and offers the lowest price, as well as all other evaluation criteria indicated, shall be selected. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price (obtained by multiplying the unit price and quantity) shall be re-computed by UNDP. The unit price shall prevail and the total price shall be corrected. If the supplier does not accept the final price based on UNDP's re-computation and correction of errors, its quotation will be rejected.

² This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

After UNDP has identified the lowest price offer, UNDP reserves the right to award the contract based only on the prices of the goods in the event that the transportation cost (freight and insurance) is found to be higher than UNDP's own estimated cost if sourced from its own freight forwarder and insurance provider.

At any time during the validity of the quotation, no price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the quotation. At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Purchase Order that will be issued as a result of this RFQ shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a quotation implies that the vendor accepts without question the General Terms and Conditions of UNDP indicated above - <http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html>.

UNDP is not bound to accept any quotation, nor award a contract/Purchase Order, nor be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.

Please be advised that UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a purchase order or contract in a competitive procurement process. **In the event that** you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link: <http://www.undp.org/content/undp/en/home/operations/procurement/protestandsanctions/>

UNDP encourages every prospective Vendor to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its suppliers to adhere to the UN Supplier Code of Conduct found in this link : http://www.un.org/depts/ptd/pdf/conduct_english.pdf

Thank you and we look forward to receiving your quotation.

Sincerely yours,
Shaima Hussein
Deputy Resident Representative
March 10, 2020



STRENGTHENING THE NATIONAL PROTECTED AREAS SYSTEMS OF ESWATINI (SNPAS) PROJECT

Terms of Reference

Title:	Re-construction of Khelekhele Camp site
Country of Assignment:	Eswatini
Starting Date:	Upon contract signature
Duration of Assignment:	6 months
Background	
<p>The SNPAS Project has been organised around three components: (i) knowledge-based platform operationalised at the national, regional and community levels to address current and emerging threats to PAs and biodiversity conservation; (ii) Expansion of PA network, and (iii) strengthening PA functioning through improved conservation management and operational support for existing and new PAs, including both formal and informal. PAs will be established and managed in critical biodiversity areas as clusters, integrating different sites that are managed by the Government of Eswatini (GoE), the private sector and local communities and enable a matrix of complementary land-use activities across the board.</p> <p>The European Union (EU) fully funded the development of community ecotourism rest facilities in strategic places around Eswatini in 2006. Eswatini Tourism Authority (ETA) supported the initiative which resulted in the construction of community owned ecolodges in Shewula, Mahamba and Velezizweni. In Velezizweni, three (3) community ecolodges were put in place, namely, Khelekhele, Khopho and Mhlabeni. Mhlabeni lodge quickly fell apart due to looting and destruction stemming from Chieftdom boundary disputes. Khelekhele and Khopho remained functional, however, throughout the years these structures degraded due to poor maintenance to a point where they were hardly usable for accommodating tourist.</p> <p>The SNPAS project target landscapes are Ngwempisi, Lubombo and Malolotja respectively. The Ngwempisi Landscape is made up of three (3) constituencies Mahlangatsha, Ngwempisi and Ntandozi Constituencies. Under the Mahlangatsha Constituency there are four (4) Communities, namely; Sigcineni, KaZulu, Bhahwini and Luzelweni. Within the Ngwempisi Constituency there is one (1) community, Velezizweni. Under the Ntandozi Constituency there are five (5) communities, namely; Ntandozi, Ndlinilembi, Ndinda, Ncabaneni, Mphini and Khalangilile. Velezizweni Chieftdom was among the priority areas that were targeted for rigorous mobilisation, capacity building and development of a Chieftdom Development Plan (CDP). One of the key focus development sectors identified by their CDP was ecotourism infrastructure. The SNPAS project initiated a rehabilitation project for Velezizweni's ecolodges Khelekhele and Khopho in 2017, to strengthen the community's income generation opportunities from nature conservation following their pledge to set aside 2144 ha of land for protection.</p> <p>Support for rehabilitation of Khelekhele commenced in October 2017 through a partnership with ETA and Micro-Projects. The project scope went on to change drastically following recommendation from multiple consultants leading towards the rebuilding of Khelekhele rather than its rehabilitation. Subsequently, the old degraded structures were demolished in preparation for building new structures. SNPAS construction projects were then stopped in December 2017 by a letter from the Principal Secretary (P.S) of the Ministry of Tourism and Environmental Affairs.</p>	

The P.S has since signed a waiver dated November 2019, allowing the SNPAS project to resume all stopped construction projects. It therefore a matter of high priority that the Khelekhele is reconstructed for the community of Velezizweni to strengthen their ecotourism and biodiversity conservation.

Job Description

The SNPAS project calls for invitations to bid from national construction companies who have the capacity to build rustic eco-friendly facilities using local and modern material to support the reconstruction of Khelekhele river lodge which will contribute to the goal of strengthening community-based eco-tourism. Companies having the expertise in doing the same work are highly encouraged to participate.

Objectives

The project objective is to effectively expand, manage and develop Eswatini's protected area network in order to adequately protect the biodiversity and landscapes of the country. This involves devising a system of integrating land and natural resource management that transforms the current PA patchwork into a protected areas network, while creating incentives for all Swazis (land management agencies, conservancies, private landowners and tourism operators) to work together toward conservation and sustainable economic development. The project aims towards supporting sustainable ecotourism infrastructure, product development or marketing programmes for SNL communities.

Scope Of Work

SNPAS project is looking for a suitable company who is a contractor with the capacity to build one (1) chalet, one (1) common room, two (2) toilets and install a secure solar pumped borehole in Velezizweni, Mankayane. The required structures must be of high quality;

Lot 1: Chalets

Detailed scope of material required for building the two chalets are found in Annexure 1 below.

Lot 2: Common room

Detailed scope of material required for building the one common room are found in Annexure 2 below.

Lot 3: Dormitory & toilets

Detailed scope of material required for building two toilets are found in Annexure 3 below.

Lot 4: Solar Powered Borehole and water tank

Detailed scope of material and accessories required for setting up a borehole water system are found in Annexure 4 below.

Service providers qualifications

Lot 1,2,3 &4:

1. Company must be a structural contractor with record of high-quality projects completed.
2. Company must be experienced in earth works in line with structural development.
3. Company must be experienced in building different structural designs and be able to quantify bill of quantities.
4. Company must be able to do construction works in Velezizweni in Mankayane.
5. Company must guarantee timely delivery of service and its risk management.

Information Required in the Response

The provision of the pre-qualification information should include all relevant documents that are essentially required for meeting pre-qualification criteria as well as enable the project management to undertake the evaluation.

Documents Required:

Documents Required:

1. Profile of company
2. Company registration (registry of companies & CIC)
3. Complete technical bid describing the materials to be used and the methodology to be applied
4. Complete financial bid for all required items.
5. List of contracts of similar jobs done with amounts and name of clients.

6. List of equipment & material for executing the job owned by service provider.

Bidders Table

Deliverables (components)	Estimated Duration To Complete	Target Dues Dates	Review and Approvals
Lot 1	6 months	30 September 2020	
Lot 2	6 months	30 September 2020	
Lot 3	6 months	30 September 2020	
Lot 4	2 months	30 May	

Proposal

Submission of comprehensive methods and processes to be used for the Project. This should highlight the following;

- Outline approach to be adopted when carrying out the task
- State and justify method/tool that will be used in the exercise (ensuring that the method is clear and replicable) – state areas where it has been successfully applied its limitation, etc.
- Highlight risks inherent to the exercise that might compromise the quality of the product and how they will be managed
- Activities that will be undertaken and corresponding schedule to demonstrate how the allocated time will be utilized.
- Financial proposal, and
- Credentials for contractor
- Bidder should share the project implementation, as a Gantt Chart or any Project Schedule
- Patent rights clause

Institutional Agreement

- All interested potential bidders to attend the physical site visit for complete understanding of Scope of Work prior to sending the formal bid.
- The winning bidder will be invited to meet with the supervision committee on expected outcome.
- All interested Bidders must recruit at least 70% of the casual laborers from the neighboring communities.

Quality Assurance Methodology

- An infrastructural supervision committee to do quality checks bi-weekly with a minimum of two site visitation in a month.
- Monitoring and evaluation of activities will be done routinely on weekly basis by the CLOs to generate weekly progress reports.
- The contractor is expected to produce weekly progress reports.
- A retention of 10% will be made for each payment certificate as surety against defects and shall be remitted after two months of job completion.
- Retention fees remitted after clearance by supervision committee.

Payment Terms

Payment upon completion of each project phase infrastructural works on site supported by a job completion certificate or invoice with payment details.	90%
Retention fee payable after evaluation by supervision committee.	10%

Annexure 1

Lot 1: Chalets

1. Earthworks

Item	Description	Unit	Quantity
	<p><u>Carting away of excavated material</u></p> <p>Description of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stockpiles situated on site.</p> <p><u>Nature of the ground:</u></p> <p>It is expected that all excavation will take place in pickable material interspersed with soft and hard rock.</p>		
	<p><u>SITE CLEARANCE</u></p> <p>Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, including grubbing up all roots, scuffing up as required and cart away all vegetation and debris.</p>	m ²	70
	<p><u>EXCAVATION</u></p> <p>Excavate in compacted pickable material as defined not exceeding 2 m deep below reduced or filled up ground level, part return, fill in and ram and remainder deposit on site where directed.</p>		
1	Excavate for surface trenches	m ³	25
2	Excavate for holes	m ³	1
3	Thickenings to surface beds	m ³	10
	<u>Risk of collapse of excavations</u>		
4	Sides of trench and hole excavations not exceeding 1.5m deep	m ²	35
	<u>Extra over trench and hole excavations in earth for excavation in</u>		
5	Soft rock	m ³	2
6	Hard rock	m ³	3
	<u>Extra over all excavations and carting away</u>		
7	Surplus material from excavations and stock piles to a dumping site to be located by the Contractor including haulage exceeding 5.0Km with the Engineer's approval	m ³	26
	<u>Keeping excavations free from water</u>		
8	Keeping excavations free of water	Item	1
	<u>Earth obtained from excavations and or / prescribed stockpiles compacted to 98% Mod. AASHTO maximum density</u>		
9	Backfilling to trenches, column bases, holes, etc.	m ³	13
	<u>Surface treatment</u>		
10	Rip the formation level to a depth of 150mm and re-compact to 95% Modified AASHTO density including working around walls and allowing for any extra selected dry earth filling required to maintain levels	m ²	23
	<u>Ant repellent</u>		
11	Saturate ground under solid floors and trenches, etc. with ant poisoning consisting of a 5% solution of Pentachlorophenol in mineral oil, sprayed or poured onto ground with a can with a coarse rose using 4 litres of mixture to each square metre of surface area.	m ²	58

2. Concrete

Item	Description	Unit	Quantity
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<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete tests cubes as required under clause 7 "Tests" of SABS G shall include the cost of procuring cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately)		
<u>Breeze concrete</u>			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16.5mm ring from a minimum which fails to pass a 4.75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated		
<u>"Foam cement" lightweight concrete</u>			
	"Foam cement" lightweight concrete is to have a density of 600/m ³ for the top 50mm and 400Kg/m ³ for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm		
<u>"Celbeton" lightweight concrete</u>			
	"Celbeton" lightweight concrete is to have a density of 1000/m ³ for the top 20mm and 480Kg/m ³ for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 30mm	-	
<u>Formwork</u>			
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and reconditioning as necessary before re-use	-	
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself	-	
	Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described	-	
<u>15MPa/ 19mm Concrete in:</u>			
1	Surface blinding under trenches	m ³	3
<u>25MPa/ 19mm Concrete</u>			
2	Strip footings	m ³	5
<u>TEST BLOCKS</u>			
3	Making and testing 150 x 150 x 150mm concrete strength test cubes	no.	12
<u>Finish top of surfaces of concrete smooth with wood float</u>			
4	Surface beds, slabs, etc	m ²	40
<u>Fabric reinforcement</u>			
5	Type 395 fabric reinforcement in concrete footings, etc	m ²	7
	Steel mesh reinforcement reference No. 193 in concrete ground slabs, etc. including all laps, bending, cutting, etc. (Measured net).	m ²	40

3. **Masonry**

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
<u>Concrete masonry units</u>			
	Blocks are either to be solid or hollow modular dense concrete masonry units having a compressive strength of 3.5MPa	-	
<u>Wall ties for blockwork</u>			

	Wall ties shall be polypropylene "permaties" complying with BS 67377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed above each other	-	
Blockwork			
	Block work shall comply with SABS 0145 "Concrete masonry construction"	-	
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or any other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be kept open as a weep hole	-	
Standard complementary blocks			
	Description of block work shall be deemed to include standard complementary blocks such as corner, three quarter, half and quarter blocks required in the construction corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary	-	
Decorative Blocks			
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour	-	
Samples			
	Samples of all masonry building units, except those for walls described as "loading bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30,000 units delivered on site	-	
Foundations			
	Blockwork in class I mortar with voids filled solid with concrete	-	-
1	230mm Blockwork in foundation walls	m ²	28
Blockwork in class II mortar			
2	230mm Walls	m ²	70
Brick reinforcement (every course)			
3	150mm Wide reinforcement built in horizontally	m	117
Brick reinforcement (every third course)			
4	150mm Wide reinforcement built in horizontally	m	293
WINDOW CILLS: Nutec cills by "Everite"			
5	15 x 170mm Heavy duty window cills set sloping and slightly projecting	m	8
Langa Bull Nose cill			
6	One row of 150mm wide langa brick cills with bull nose edge set flat and slightly projecting on wall	m	8

4. Water proofing

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
<u>WATERPROOFING</u>			

	Waterproofing for roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid even to falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheets or membrane waterproofing shall be deemed to include turn-ups and turn-downs	-	-
<u>DAMP PROOFING OF WALLS AND FLOORS</u>			
	One layer 375 micron "Console Plastic Brickgrip DPC" embossed damp proof course	-	-
<u>1</u>	<u>In walls</u>	<u>m²</u>	<u>7</u>
	One layer 250 micron "Console Plastic Gunplas USB Green" waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"	-	-
<u>2</u>	<u>Under surface beds</u>	<u>m²</u>	<u>40</u>
<u>Joint Sealants Etc</u>			
	Polysulphide sealing compound including backing cord, bond breaker, primer, etc		-
<u>3</u>	<u>10mm In expansion joints in floors (Provisional)</u>	<u>m</u>	<u>50</u>

5. Roof

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>Roof Coverings, Profiled Metal Sheetting And Accessories</u>			
	0.58mm IBR Galvanised mild steel roof sheeting with baked enamel CHROMODECK / COLOMET finish "Aloe Green" in single lengths on timber purlins at 900mm maximum centres in strict accordance with the manufacturer's instructions	-	-
<u>1</u>	<u>Roof Covering with pitch not exceeding 25°</u>	<u>m²</u>	<u>89</u>
<u>ROOF AND WALL INSULATION</u>			
	"Sisalation 410" grade glass fibre reinfriced aluminium foil bonded insulation	-	-
<u>2</u>	<u>Insulation laid taut over timber purlins (at approximately 900mm centers) including galvanised straining wire</u>	<u>m²</u>	<u>89</u>

6. Carpentry

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>Carpentry And Joinery: For Preambles See "Standard Preambles To All Trades"</u>			
-	For Preambles see "Standard Preambles to all Trades"	-	-
-		-	-
-	<u>ROOF CONSTRUCTION: Sawn South African Pine</u>	-	-
<u>1</u>	<u>50 x 75mm Timber purlins</u>	<u>m</u>	<u>106</u>
-	<u>Sawn Softwood</u>	-	-
<u>2</u>	<u>100mm Diameter Gumpole rafter</u>	<u>m</u>	<u>60</u>
<u>3</u>	<u>100mm Diameter Gumpole king post</u>	<u>m</u>	<u>27</u>
<u>4</u>	<u>100mm Diameter columns Gum Poles</u>	<u>m</u>	<u>5</u>
<u>5</u>	<u>100mm Diameter beam Gum poles</u>	<u>m</u>	<u>27</u>
<u>6</u>	<u>100mm Diameter Gum pole wall plate</u>	<u>m</u>	<u>10</u>
<u>Ceiling gum poles</u>			
-	20mm diameter gum poles layed in between purlins	<u>m²</u>	<u>86</u>
<u>Doors, Windows, Sashes, Etc.</u>			

	Saligna framed, ledged and braced batten doors with tongue and grooved boarding let in flush externally, fitted with hardwood weather strip including hanging in timber frame.	-	-
<u>7</u>	44mm door, size 900 x 2100mm high	<u>No</u>	<u>3</u>
<u>Framed Frames, Etc.</u>			
-	150 x 45mm Rebated "Saligna" frame supplied with cover strips for:	-	-
<u>8</u>	Door, size 900 x 2100mm high.	<u>No</u>	<u>3</u>
<u>Facias, Barge Boards, Etc:</u>			
<u>9</u>	12 x 225 mm Fibre cement fascia and barge board drilled and brass screwed and including steel jointing strips between lengths.	<u>m</u>	<u>104</u>
<u>FLOORS: Sawn Softwood</u>			
<u>10</u>	38 x 114mm Floor timber joists in lengths exceeding 3.9m and not exceeding 6.6m	<u>m</u>	<u>11</u>
-		-	-
<u>11</u>	20mm thick timber floor boarding	<u>m²</u>	<u>10</u>

7. Ironmongery

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>HINGES, BOLTS: Brass</u>			
<u>1</u>	100mm Butt hinges	<u>No</u>	<u>9</u>
<u>LOCKS: Union</u>			
<u>2</u>	"Radius Euro Profile" double cylinder lockset ref: CZ692-05-222SC	<u>No</u>	<u>2</u>
<u>LETTERS, NAMEPLATES: Union</u>			
<u>3</u>	Plate with symbol Ref SS506E - 06SSE11	<u>No</u>	<u>1</u>
<u>SUNDRIES</u>			
<u>4</u>	Coat and hat hook ref: AL8722AS	<u>No</u>	<u>3</u>

8. Metalworks

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions of bolts shall be deemed to include nuts and washers</u>	-	-
	<u>Descriptions of expansion anchors and bolts and cheemical anchors and bolts shall be deemed to include nuts, washers and mortices in blockwork or concrete</u>	-	-
	<u>Metalwork described as "holed for bolt (s)" shall be deemed to exclude the bolts unless otherwise described</u>	-	-
<u>PRESSED STEEL DOOR FRAMES AND WINDOW FRAMES</u>			
	<u>"Durowin" Heavy duty purpose made pressed steel window frame fitted and including type B33 burglar bars to all sections</u>	-	-
<u>4</u>	<u>Window type C2F, size 1022x949mm high</u>	<u>No</u>	<u>2</u>
<u>5</u>	<u>Window type D52F, size 1022x1540mm high</u>	<u>No</u>	<u>2</u>
<u>6</u>	<u>Window type D54F, size 1511x1540mm high</u>	<u>No</u>	<u>1</u>

9. Plastering

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>PLASTERING: SCREEDS</u>			
-	<u>3 : 1 Cement plaster screed wood floated on concrete</u>	-	-
<u>1</u>	<u>30mm Thick on floors and landings</u>	<u>m²</u>	<u>28</u>
<u>2</u>	<u>30mm Thick in narrow widths</u>	<u>m²</u>	<u>4</u>
<u>INTERNAL PLASTER</u>			
-	<u>Cement plaster wood floated on block work</u>	-	-
<u>3</u>	<u>On walls</u>	<u>m²</u>	<u>57</u>
<u>4</u>	<u>On narrow widths</u>	<u>m²</u>	<u>1</u>
<u>EXTERNAL PLASTER</u>			
-	<u>Cement plaster wood floated on block work</u>	-	-
<u>5</u>	<u>On walls</u>	<u>m²</u>	<u>70</u>
<u>6</u>	<u>On narrow widths</u>	<u>m²</u>	<u>1</u>
<u>STONE PITCHING</u>			
-	<u>Stone pitching of approximately 200mm diameter river stones tightly packed including preparation of ground surface under;</u>	-	-
<u>7</u>	<u>120mm Thick against sloping banks bedded and jointed in 1:8 cement mortar and pointed with hollow recessed joints</u>	<u>m²</u>	<u>75</u>
<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>			
<u>8</u>	<u>3 x 30mm Flat section brass dividing strips between different floor finishes</u>	<u>m</u>	<u>2</u>

10. Tilling

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
<u>Wall Tiling</u>			
	<u>Unless described as "fixed with adhesive to (plaster elsewhere)" descriptions of tiling on block or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</u>	-	-
	<u>245 x 195 x 6mm "Johnsons" carmina range ceramic tiles fixed with approved adhesive to and including plaster backing on block work</u>	-	-
<u>1</u>	<u>On walls</u>	<u>m²</u>	<u>21</u>
<u>2</u>	<u>On narrow widths</u>	<u>m²</u>	<u>3</u>
<u>FLOOR TILING</u>			
	<u>300 x 300 x 15mm Ceramic floor tiles bedding on concrete and flush pointed with tinted water proof jointing compound with and including expansion joints at 3.00m centers in both directions</u>	-	-
<u>3</u>	<u>On floors</u>	<u>m²</u>	<u>5</u>
<u>4</u>	<u>On narrow widths</u>	<u>m²</u>	<u>1</u>
<u>5</u>	<u>Skirting 100mm high cut from adjacent floor tile</u>	<u>m</u>	<u>10</u>
	<u>300 x 300 x 15mm Porcelain tiles bedding on concrete and flush pointed with tinted water proof jointing compound with and including expansion joints at 3.00m centers in both directions</u>	-	-
<u>6</u>	<u>On floors</u>	<u>m²</u>	<u>18</u>
<u>7</u>	<u>Skirting 100mm high cut from adjacent floor tile</u>	<u>m</u>	<u>17</u>

11. Glazing

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
	<u>GLAZING: 4 mm Clear float glass</u>	-	-
1	Panes exceeding 1.0m ² and not exceeding 2.0m ²	m ²	6
	4mm Obscure glass	-	-
2	Panes exceeding 0.1 and not exceeding 0.5m ²	m ²	2
<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	6mm Silver float glass copper backed with polished edges fixed with gold plated screw heads at corners	-	-
3	Mirror 600 x 450mm high	No.	1

12. Plumbing

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings		
<u>uPVC pipes and fittings</u>			
	Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings		
	Soil, waste and vent pipes and fittings shall be solvent weld jointed		
<u>uPVC pressure pipes and fittings</u>			
	Pipes for water supply shall be of the class stated		
	Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings		
	Pipes of 50mm diameter and greater shall have sockets and spigots with pushing type intergral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints		
<u>Copper pipes</u>			
	Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half hard), Class 2 (half hard) and class 3 (heavy walled half hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.		
<u>Wire gratings</u>			
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings		
<u>Exposed concrete surfaces</u>			
	Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catch pits, inspection chambers, etc shall be finished smooth with plaster		
<u>Excavations</u>			
	No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling		

	"Soft rock" and "Hard rock" shall be as defined in "Earthworks"		
<u>Laying, backfilling, bedding, etc of pipes</u>			
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturer's instructions		
	Where no manufacturer's instructions exist pipes shall be laid in accordance with clause 5,1 and 5,2 of each of the following:		
	SABS 1200 L : Medium-pressure pipelines		
	LD : Sewers		
	LE : Stormwater drainage		
	Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB: Earthworks (pipe trenches)		
	Pipes shall be backfilled in accordance with clauses 3,1 4.1, 5.1 to 5.3 and 7 of SABS 1200 LB: Bedding (pipes)		
	Unless otherwise described bedding of rigid pipes shall be class B bedding		
<u>Flush pans</u>			
	Flush pans shall have straight or side outlets and "P" or "S" traps as necessary		
<u>Stainless steel basins, sinks, wash troughs, urinals, etc</u>			
	Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable		
<u>Waste unions</u>			
	Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings		
	<u>STORMWATER CHANNELS: Precast concrete channels</u>		
2	Sewer Inspection chamber as 1000 x 1000mm internally with 450 x 600mm opening not exceeding 1.0m deep internally	No	5
	Sewer Inspection chamber as 1000 x 1000mm internally with 450 x 600mm opening exceeding 1.0m and not exceeding 2.0m deep internally	No	5
<u>Gratings, Covers, etc</u>			
3	450 x 450mm x 30kg Cast iron dished grating and frame	No	10
<u>SOIL DRAINAGE : uPVC pipes</u>			
4	110mm Pipes laid in and including trenches not exceeding 1.00m deep internally	m	40
5	110mm Pipes laid in and including trenches exceeding 1.00m deep internally	m	28
<u>Extra over uPVC pipes for fittings</u>			
6	110mm Bend	No	8
7	110mm Junction	No	8
8	110mm Sockets	No	5
9	110mm Access bend	No	4
10	110mm Vent cowl	No	1
11	110mm ABC rodding eye	No	1
<u>uPVC gulleys</u>			
12	110mm Gully not exceeding 750mm deep internally	No	1
<u>Gratings, covers,</u>			

13	450 x 600mm 25kg Cast iron double seal manhole cover and frame	No	10
<u>Sundries</u>			
14	Testing drainage pipe system	Item	1
<u>SANITARY FITTINGS</u>			
15	"Tuscany" close couple WC suite code 571085 comprising of pan with heavy duty double flap seat and cistern complete	No	1
16	"Cameo" vitreous china 595 x 455mm oval self rimming vanity basin Ref: 7028 with and including 1 number tap hole, special overflow Ref: 8784Z0, chain stay-hole complete	No	1
17	CTM Shower tray complete set	No	1
	<u>0.8mm Thick type 18/10 Stainless steel with a single piece pressed lid, welded container with and including cylinder lock and a Franke standard key - satin finish.</u>		
18	Double toilet roll holder Ref: CHRX672	No	1
<u>WASTE UNIONS</u>			
19	38mm Sink waste union	No	1
20	32mm Basin waste union	No	1
<u>TRAPS, VALVES: uPVC "Marley"</u>			
21	Grease trap overall size 750 x 500 wide x 750mm deep, comprising of concrete bed walls, covers, including excavations, backfilling and uPVC fittings complete	No	1
<u>"Cobra Watertech"</u>			
22	32mm 340 CP bottle trap	No	1
<u>"Cobra Watertech"</u>			
23	22mm 1003/125RB gate valve	No	1
24	15mm 1003/121RB gate valve	No	1
25	22mm 126RB stopcock	No	2
26	15mm 211CP Pillar taps	No	2
27	15mm 266CP Sink mixer	No	2
28	PA1.RB "Kwikflo" 400 kPa pressure reducing valve	No	2
29	PB1.10RB vacuum breaker	No	2
<u>SANITARY PLUMBING: uPVC pipes</u>			
30	50mm Pipes	m	25
31	110mm Pipes	m	5
32	50mm Pipes laid in and including trenches not exceeding 1.00m deep	m	6
33	110mm Pipes laid in and including trenches not exceeding 1.00m deep	m	9
<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No	5
35	110mm Bend	No	5
36	50mm Junction	No	3
37	110mm Junction	No	3
38	50mm Access bend	No	8
39	110mm Access bend	No	6
40	50mm Access Junction	No	12
41	110mm Access junction	No	9

42	50mm "GI Two-Way" vent valve	No	18
43	110mm "GI Two-Way" vent valve	No	6
<u>Sundries</u>			
44	Testing waste pipe system	Item	1
<u>WATER SUPPLIES: Class 12 uPVC pressure pipes</u>			
45	50mm Pipes laid in and including trenches	m	15
46	75mm Pipes laid in and including trenches	m	15
<u>Extra over uPVC pressure pipes for solvent welded pressure fittings</u>			
47	50mm Elbows	No	2
48	75mm Reducer	No	3
49	50mm Tee	No	8
50	75mm Tee	No	8
51	25 x 50 x 75mm Reducing tee	No	5
<u>Class 1 copper pipes</u>			
52	15mm Pipes	m	8
53	22mm Pipes	m	7
<u>Extra over class 1 copper pipes for capillary fittings</u>			
54	15mm Fittings	No	5
55	22mm Fittings	No	5
<u>Extra over class 1 copper pipes for brass compression fittings</u>			
56	15mm Fittings	No	68
57	22mm Fittings	No	15
<u>Copper overflow and service pipes</u>			
58	22mm Overflow pipe 500mm girth twice bent	No	1
59	15mm Overflow pipe 450mm girth	No	1
<u>Sundries</u>			
60	460 x 460mm Cast iron stopcock box including brick chamber below not exceeding 750mm deep internally	No	3
<u>ELECTRIC WATER HEATERS</u>			
61	150 Litre "Megaflo" horizontal wall mounted electric water heater	No	1
<u>TESTING</u>			
62	Testing water pipes systems	Item	1
<u>FIRE APPLIANCES ETC</u>			
	"Chubb"		
63	"Everyway" hose reel complete with 30m rubber hose, chromium plated stop cock, shut-off nozzle and wall bracket	No	1
64	9kg Dry chemical fire extinguisher	No	1
65	4,5kg Carbon dioxide fire extinguisher	No	1
<u>WATER SUPPLIES TO FIRE APPLIANCES</u>			
	Galvanized steel pipes		
66	22mm Pipes	m	6
<u>Extra over Galvanized steel pipes</u>			

67	22mm Bend	No	3
68	22mm Tee	No	4
69	22mm Union	No	1
<u>Sundries</u>			
70	Testing fire water system	Item	1

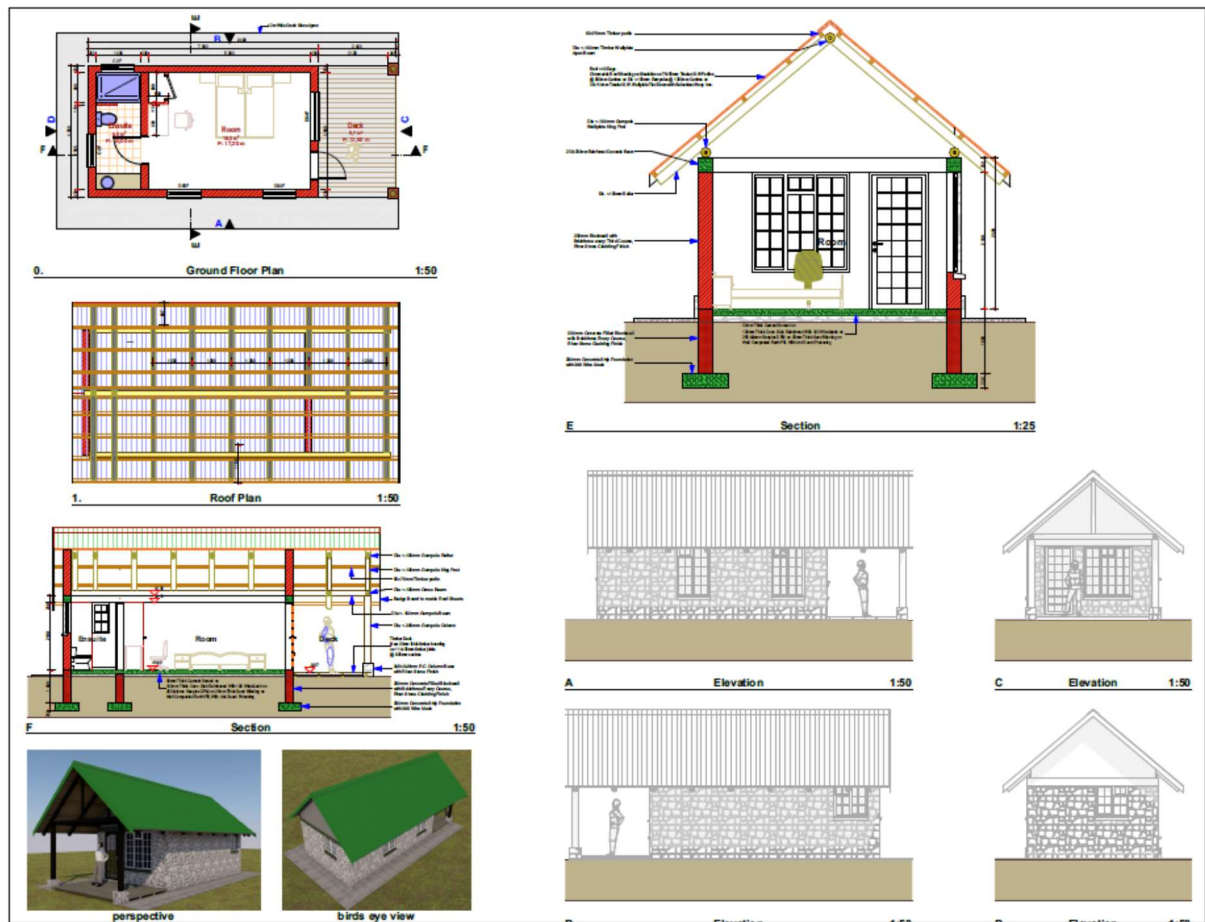
13. Paintwork

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>PAINT SPECIFICATIONS</u>			
	<u>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</u>		-
<u>COLOURS</u>			
	<u>Unless otherwise decsribed all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accodance with SANS 1091</u>		-
<u>EXTERNALLY</u>			
	<u>One coat acrylic fillercoat and two finishing coats "Dulux" acrylic PVA paint on:</u>		-
1	<u>On external walls</u>	<u>m²</u>	<u>5</u>
2	<u>On narrow widths</u>	<u>m²</u>	<u>1</u>
<u>INTERNALLY</u>			
	<u>One coat acrylic fillercoat and two finishing coats "Dulux" acrylic PVA paint on:</u>	-	-
3	<u>On internal walls</u>	<u>m²</u>	<u>36</u>
4	<u>On narrow widths</u>	<u>m²</u>	<u>1</u>
<u>ON PLASTER BOARD</u>			
	<u>One alkili resistant primer and two coats polyacrilic emulsion paint</u>	-	-
5	<u>On fascia boards</u>	<u>m</u>	<u>10</u>
6	<u>On window cills</u>	<u>m</u>	<u>1</u>
<u>ON METAL</u>			
	<u>Spot priming defects on pre primed surfaces with zink chromate primer and applying one under coat and two coats alkyd enamel paint on steel</u>	-	-
7	<u>On Window frame</u>	<u>m²</u>	<u>41</u>
8	<u>On window frames including burglar bars</u>	<u>m²</u>	<u>8</u>
<u>ON WOOD</u>			
	<u>One under coat and two coats high gloss alkyd enamel paint</u>		-
9	<u>On doors</u>	<u>m²</u>	<u>12</u>

14. External works

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>Excavation in earth not exceeding 2.00m deep including gravel road</u>			

<u>1</u>	<u>Open excavation in cut to fill to formation level including compaction to 95% Mod ASSHTO density in layers not exceeding 300mm in cut to fill</u>	<u>m³</u>	<u>5</u>
<u>Extra over all excavations for carting away</u>			
<u>2</u>	<u>Surplus material from stock piles to a dumping site to be located by the Contractor with the engineer's approval including haulage exceeding 1km</u>	<u>m³</u>	<u>5</u>
<u>Earth filling supplied by the Contractor under pavings and gravel road etc</u>			
<u>3</u>	<u>Over site of G6 material in accordance with SABS 1200 DM compacted to 98% Mod ASSHTO density</u>	<u>m³</u>	<u>5</u>
<u>4</u>	<u>Crush stones well spread</u>	<u>m²</u>	<u>26</u>
<u>Surface treatment</u>			
<u>5</u>	<u>Rip the formation level to a depth of 150mm and re-compact to 95% Modified AASHTO density including working around walls and allowing for any extra selected dry earth filling required to maintain levels</u>	<u>m²</u>	<u>26</u>
<u>Ant repellent</u>			
<u>6</u>	<u>Saturate ground under solid floors and trenches, etc. with ant poisoning consisting of a 5% solution of Pentachlorophenol in mineral oil, sprayed or poured onto ground with a can with a coarse rose using 4 litres of mix ture to each square metre of surface area.</u>	<u>m²</u>	<u>26</u>
<u>7</u>	<u>Allow for the provision of density tests to be carried out by the Contractor and pay all charges in connection therewith.</u>	<u>Item</u>	<u>1</u>



Annexure 2

Lot 2: Common room

1. Earthworks

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
	<u>EARTHWORKS (PROVISIONAL)</u>		
	1.0 Rates for formwork shall include for any necessary working space and for the insersion and removal of formwork to sides of column bases.		
	2.0 In the event such that ground conditions are such that formwork is not required, the appropriate items shall be adjusted accordingly.		
	<u>Carting away of excavated material</u>		
	Description of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or , altanatively, from stock piles situated on site.		
	<u>Nature of the ground:</u>		
	It is expected that all excavation will take place in pickable material interspersed with soft and hard rock.		
<u>Excavate in compacted pickable material as defined not exceeding 2 m deep below reduced or filled up ground level, part return, fill in and ram and remainder deposit on site where directed.</u>			
1	Excavate for surface trenches	m ³	65
2	Excavate for holes	m ³	1
3	Thickenings to surface beds	m ³	17
<u>Risk of collapse of excavations</u>			
4	Sides of trench and hole excavations not exceeding 1.5m deep	m ²	164
	<u>Extra over trench and hole excavations in earth for excavation in</u>		
5	Soft rock	m ³	5
6	Hard rock	m ³	6
<u>Extra over all excavations and carting away</u>			
7	Surplus material from excavations and stock piles to a dumping site to be located by the Contractor including haulage exceeding 5.0Km with the Engineer's approval	m ³	66
<u>Keeping excavations free from water</u>			
8	Keeping excavations free of water	Item	1
	<u>Earth obtained from excavations and or / prescribed stockpiles compacted to 98% Mod. AASHTO maximum density</u>		
9	Backfilling to trenches, column bases, holes, etc.	m ³	25
<u>Surface treatment</u>			
10	Rip the formation level to a depth of 150mm and re-compact to 95% Modified AASHTO density including working around walls and allowing for any extra selected dry earth filling required to maintain levels	m ²	60
<u>Ant repellent</u>			

11	Saturate ground under solid floors and trenches, etc. with ant poisoning consisting of a 5% solution of Pentachlorophenol in mineral oil, sprayed or poured onto ground with a can with a coarse rose using 4 litres of mix ture to each square metre of surface area.	m ²	224
12	Allow for the provision of density tests to be carried out by the Contractor and pay all charges in connection therewith.	Item	1

2. Concrete

Item	Discription	Unit	Quantity
<u>CONCRETE, FORMWORK & REINFORCEMENT</u>			
	The costs of making, storing and testing of concrete tests cubes as required under clause 7 "Tests" os SABS G shall include the cost of prociding cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independant firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately)	-	
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16.5mm ring from a minimum which fails to pass a 4.75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated	-	
	"Form cement" lightweight concrete is to have a density of 600/m3 for the top 50mm and 400Kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm	-	
	"Celbeton" lightweight concrete is to have a density of 1000/m3 for the top 20mm and 480Kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 30mm	-	
<u>Formwork</u>			
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and reconditioning as necessary before re-use	-	
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself	-	
	Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described	-	
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>15MPa/ 19mm Concrete in:</u>	-	
1	Surface blinding under trenches	m ³	5
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/ 19mm Concrete</u>		
2	Strip footings	m ³	12
3	Surfaces beds cast in panels on waterproofing	m ³	6
<u>REINFORCED CONCRETE</u>			
	<u>25MPa/ 19mm Concrete</u>		

4	Ring beams	m ³	3
5	Making and testing 150 x 150 x 150mm concrete strength test cubes	no.	24
<u>CONCRETE SUNDRIES</u>			
	<u>Finish top of surfaces of concrete smooth with wood float</u>		
6	Surface beds, slabs, etc	m ²	60
<u>Fabric reinforcement</u>			
7	Type 395 fabric reinforcement in concrete footings, etc	m ²	26
8	Steel mesh reinforcement reference No. 193 in concrete ground slabs, etc. including all laps, bending, cutting, etc. (Measured net).	m ²	60

3. Masonry

Item	Discription	Unit	Quantity
<u>Concrete masonry units</u>			
	Blocks are either to be solid or hollow modular dense concrete masonry units having a compressive strength of 3.5MPa	-	
<u>Wall ties for blockwork</u>			
	Wall ties shall be polypropylene "permaties" complying with BS 67377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed above each other	-	
<u>Blockwork</u>			
	Block work shall comply with SABS 0145 "Concrete masonry construction"	-	
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or any other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be kept open as a weep hole	-	
<u>Standard complementary blocks</u>			
	Description of block work shall be deemed to include standard complementary blocks such as corner, three quarter, half and quarter blocks required in the construction corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary	-	
<u>DECORATIVE BLOCKS</u>			
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour	-	
<u>SAMPLES</u>			
	Samples of all masonry building units, except those for walls described as "loading bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30,000 units delivered on site	-	
<u>FOUNDATIONS</u>			
	<u>Blockwork in class I mortar with voids filled solid with concrete</u>	-	
1	230mm Blockwork in foundation walls	m ²	52
<u>Blockwork in class II mortar</u>			
2	230mm Walls	m ²	130
<u>BLOCKWORK SUNDRIES</u>			
	<u>Brick reinforcement (every course)</u>	-	-
3	150mm Wide reinforcement built in horizontally	m	218

	<u>Brick reinforcement (every third course)</u>	-	-
4	150mm Wide reinforcement built in horizontally	m	545
<u>WINDOW CILLS</u>			
	<u>Nutec cills by "Everite"</u>	-	
5	15 x 170mm Heavy duty window cills set sloping and slightly projecting	m	4
<u>Langa Bull Nose cill</u>			
		-	
6	One row of 150mm wide langa brick cills with bull nose edge set flat and slightly projecting on wall	m	4

4. Waterproofing

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>Waterproofing</u>			
	Waterproofing for roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid even to falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheets or membrane waterproofing shall be deemed to include turn-ups and turn-downs	-	
<u>DAMP PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375 micron "Console Plastic Brickgrip DPC" embossed damp proof course</u>	-	
1	In walls	m ²	12
	<u>One layer 250 micron "Console Plastic Gunplas USB Green" waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"</u>		
2	Under surface beds	m ²	60
<u>JOINT SEALANTS ETC</u>			
	<u>Polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>		
3	10mm In expansion joints in floors (Provisional)	m	50

5. Roof Cover

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0.58mm IBR Galvanised mild steel roof sheeting with baked enamel CHROMODECK / COLOMET finish "Aloe Green" in single lengths on timber purlins at 900mm maximum centres in strict accordance with the manufacturer's instructions</u>		
1	Roof Covering with pitch not exceeding 25°	m ²	150
<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" grade glass fibre reinforced aluminium foil bonded insulation</u>		
2	Insulation laid taut over timber purlins (at approximately 900mm centers) including galvanised straining wire	m ²	150

6. Carpentry

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>CARPENTRY AND JOINERY</u>			
	For Preambles see "Standard Preambles to all Trades"		
<u>Sawn South African Pine</u>			
1	50 x 75mm Timber purlins	m	161
<u>Sawn Softwood</u>			

2	100mm Diameter Gumpole rafter	m	71
3	100mm Diameter Gumpole king post	m	30
4	100mm Diameter columns Gum Poles	m	5
5	100mm Diameter beam Gum poles	m	38
6	100mm Diameter Gum pole wall plate	m	15
<u>Ceiling gum poles</u>			
	20mm diameter gum poles layed in between purlins	m ²	86
<u>DOORS, WINDOWS, SASHES, ETC.</u>			
	<u>Saligna framed, ledged and braced batten doors with tongue and grooved boarding let in flush externally, fitted with hardwood weather strip including hanging in timber frame.</u>		
7	44mm door, size 900 x 2100mm high	No	4
<u>FRAMED FRAMES, ETC.</u>			
	<u>150 x 45mm Rebated "Saligna" frame supplied with cover strips for:</u>		
8	Door, size 900 x 2100mm high.	No	4
<u>FACIAS, BARGE BOARDS, ETC:</u>			
9	12 x 225 mm Fibre cement fascia and barge board drilled and brass screwed and including steel jointing strips between lengths.	m	38

7. Ironmongery

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>HINGES, BOLTS, ETC</u>			
	<u>Brass</u>		
1	100mm Butt hinges	No	12
<u>LOCKS</u>			
	<u>"Union"</u>		
2	"Radius Euro Profile" double cylinder lockset ref: CZ692-05-222SC	No	4
<u>LETTERS, NAMEPLATES, ETC</u>			
	<u>"Union"</u>		
3	Plate with symbol Ref SS506E - 06SSE11	No	4
<u>SUNDRIES</u>			
	<u>"Union"</u>		
4	Coat and hat hook ref: AL8722AS	No	3

8. Metalwork

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>METAL WORK</u>			
	Descriptions of expansion anchors and bolts and cheemical anchors and bolts shall be deemed to include nuts, washers and mortices in blockwork or concrete		
	Metalwork described as "holed for bolt (s)" shall be deemed to exclude the bolts unless otherwise described		
<u>PRESSED STEEL DOOR FRAMES AND WINDOW FRAMES</u>			
	<u>"Durowin" Heavy duty purpose made pressed steel window frame fitted and including type B33 burglar bars to all sections</u>		
4	Window type C2F, size 1022x949mm high	No	2
5	Window type D52F, size 1022x1540mm high	No	1

9. Plastering

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>3 : 1 Cement plaster screed wood floated on concrete</u>			
1	30mm Thick on floors and landings	m ²	60
2	30mm Thick in narrow widths	m ²	9
<u>INTERNAL PLASTER</u>			
	<u>Cement plaster wood floated on block work</u>		
3	On walls	m ²	115
4	On narrow widths	m ²	2
<u>EXTERNAL PLASTER</u>			
	<u>Cement plaster wood floated on block work</u>		
5	On walls	m ²	75
6	On narrow widths	m ²	2
<u>STONE PITCHING</u>			
	<u>Stone pitching of approximately 200mm diameter river stones tightly packed including preparation of ground surface under:</u>		
7	120mm Thick against sloping banks bedded and jointed in 1:8 cement mortar and pointed with hollow recessed joints	m ²	198
<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>			
8	3 x 30mm Flat section brass dividing strips between different floor finishes	m	4

10. Tiling

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
	<u>FLOOR TILING</u>		
	<u>300 x 300 x 15mm Ceramic floor tiles bedding on concrete and flush pointed with tinted water proof jointing compound with and including expansion joints at 3.00m centers in both directions</u>		
3	On floors	m ²	17
4	On narrow widths	m ²	1
5	Skirting 100mm high cut from adjacent floor tile	m	38
	<u>300 x 300 x 15mm Porcelain tiles bedding on concrete and flush pointed with tinted water proof jointing compound with and including expansion joints at 3.00m centers in both directions</u>		
6	On floors	m ²	40
7	Skirting 100mm high cut from adjacent floor tile	m	18

11. Glazing

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>GLAZING</u>			
	<u>4 mm Clear float glass</u>		
1	Panes exceeding 1.0m2 and not exceeding 2,0m2	m ²	6
	<u>4mm Obscure glass</u>		
2	Panes exceeding 0.1 and not exceeding 0.5m2	m ²	2
<u>TOPS, SHELVES, DOORS, MIRRORS</u>			

	<u>6mm Silver float glass copper backed with polished edges fixed with gold plated screw heads at corners</u>		
3	Mirror 600 x 450mm high	No.	3

12. Plumbing

Item	Discription	Unit	Quantity
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	All pipe diameters are nominal external		
<u>Concrete pipes</u>			
	Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings		
<u>uPVC pipes and fittings</u>			
	Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings		
	Soil, waste and vent pipes and fittings shall be solvent weld jointed		
<u>uPVC pressure pipes and fittings</u>			
	Pipes for water supply shall be of the class stated		
	Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings		
	Pipes of 50mm diameter and greater shall have sockets and spigots with pushing type intergral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints		
<u>Copper pipes</u>			
	Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half hard), Class 2 (half hard) and class 3 (heavy walled half hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground		
<u>Wire gratings</u>			
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings		
<u>Exposed concrete surfaces</u>			
	Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catch pits, inspection chambers, etc shall be finished smooth with plaster		
<u>Excavations</u>			
	No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling		
	"Soft rock" and "Hard rock" shall be as defined in "Earthworks"		
<u>Laving, backfilling, bedding, etc of pipes</u>			
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturer's instructions		
	Where no manufacturer's instructions exist pipes shall be laid in accordance with clause 5,1 and 5,2 of each of the following:		
	SABS 1200 L : Medium-pressure pipelines		
	LD : Sewers		

	LE : Stormwater drainage		
	Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB: Earthworks (pipe trenches)		
	Pipes shall be backfilled in accordance with clauses 3, 4.1, 5.1 to 5.3 and 7 of SABS 1200 LB: Bedding (pipes)		
	Unless otherwise described bedding of rigid pipes shall be class B bedding		
	Flush pans shall have straight or side outlets and "P" or "S" traps as necessary		
<u>Stainless steel basins, sinks, wash troughs, urinals, etc</u>			
	Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable		
<u>Waste unions</u>			
	Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings		
1	Contractors are to produce and submit plumbing as built drawings to the Client upon completion	Item	1
<u>STORMWATER CHANNELS : Precast concrete channels</u>			
2	Sewer Inspection chamber as 1000 x 1000mm internally with 450 x 600mm opening not exceeding 1.0m deep internally	No	5
	Sewer Inspection chamber as 1000 x 1000mm internally with 450 x 600mm opening exceeding 1.0m and not exceeding 2.0m deep internally	No	5
<u>Gratings, Covers, etc</u>			
3	450 x 450mm x 30kg Cast iron dished grating and frame	No	10
<u>SOIL DRAINAGE</u>			
	<u>uPVC pipes</u>		
4	110mm Pipes laid in and including trenches not exceeding 1.00m deep internally	m	40
5	110mm Pipes laid in and including trenches exceeding 1.00m deep internally	m	28
<u>Extra over uPVC pipes for fittings</u>			
6	110mm Bend	No	8
7	110mm Junction	No	8
8	110mm Sockets	No	5
9	110mm Access bend	No	4
10	110mm Vent cowl	No	1
11	110mm ABC rodding eye	No	1
<u>uPVC gulleys</u>			
12	110mm Gully not exceeding 750mm deep internally	No	1
<u>Gratings, covers, etc</u>			
13	450 x 600mm 25kg Cast iron double seal manhole cover and frame	No	10
<u>Sundries</u>			
14	Testing drainage pipe system	Item	1
<u>SANITARY FITTINGS</u>			
15	"Tuscany" close couple WC suite code 571085 comprising of pan with heavy duty double flap seat and cistern complete	No	2

16	"Cameo" vitreous china 595 x 455mm oval self rimming vanity basin Ref: 7028 with and including 1 number tap hole, special overflow Ref: 8784Z0, chain stay-hole complete	No	2
17	CTM Shower tray complete set	No	2
<u>Stainless steel</u>			
24	"Franke Kitchen Systems" stainless steel inset sink and drainer size 860 x 435mm single bowl kitchen sink Ref: "curveline" CVN611 with one tap hole Ref: 310370 with 38mm PVC waste and plug with handle Ref: 302021	No	1
	<u>0.8mm Thick type 18/10 Stainless steel with a single piece pressed lid, welded container with and including cylinder lock and a Franke standard key - satin finish.</u>		
18	Double toilet roll holder Ref: CHRX672	No	2
19	38mm Sink waste union	No	1
20	32mm Basin waste union	No	1
<u>TRAPS, VALVES ETC</u>			
	<u>uPVC "Marley"</u>		
21	Grease trap overall size 750 x 500 wide x 750mm deep, comprising of concrete bed walls, covers, including excavations, backfilling and uPVC fittings complete	No	2
	<u>"Cobra Watertech"</u>		
22	32mm 340 CP bottle trap	No	2
	<u>TAPS, VALVES ETC</u>		
	<u>"Cobra Watertech"</u>		
23	22mm 1003/125RB gate valve	No	3
24	15mm 1003/121RB gate valve	No	3
25	22mm 126RB stopcock	No	2
26	15mm 211CP Pillar taps	No	2
27	15mm 266CP Sink mixer	No	2
28	PA1.RB "Kwikflo" 400 kPa pressure reducing valve	No	2
29	PB1.10RB vacuum breaker	No	2
<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>		
30	50mm Pipes	m	25
31	110mm Pipes	m	5
32	50mm Pipes laid in and including trenches not exceeding 1.00m deep	m	6
33	110mm Pipes laid in and including trenches not exceeding 1.00m deep	m	9
<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No	5
35	110mm Bend	No	5
36	50mm Junction	No	3
37	110mm Junction	No	3
38	50mm Access bend	No	8
39	110mm Access bend	No	6
40	50mm Access Junction	No	12
41	110mm Access junction	No	9
42	50mm "GI Two-Way" vent valve	No	18

43	110mm "GI Two-Way" vent valve	No	6
<u>Sundries</u>			
44	Testing waste pipe system	Item	1
<u>WATER SUPPLIES</u>			
	<u>Class 12 uPVC pressure pipes</u>		
45	50mm Pipes laid in and including trenches	m	15
46	75mm Pipes laid in and including trenches	m	15
<u>Extra over uPVC pressure pipes for solvent welded pressure fittings</u>			
47	50mm Elbows	No	2
48	75mm Reducer	No	3
49	50mm Tee	No	8
50	75mm Tee	No	8
51	25 x 50 x 75mm Reducing tee	No	5
<u>Class 1 copper pipes</u>			
52	15mm Pipes	m	8
53	22mm Pipes	m	7
<u>Extra over class 1 copper pipes for capillary fittings</u>			
54	15mm Fittings	No	5
55	22mm Fittings	No	5
<u>Extra over class 1 copper pipes for brass compression fittings</u>			
56	15mm Fittings	No	68
57	22mm Fittings	No	15
<u>Copper overflow and service pipes</u>			
58	22mm Overflow pipe 500mm girth twice bent	No	1
59	15mm Overflow pipe 450mm girth	No	1
<u>Sundries</u>			
60	460 x 460mm Cast iron stopcock box including brick chamber below not exceeding 750mm deep internally	No	3
<u>ELECTRIC WATER HEATERS "Kwikot"</u>			
61	150 Litre "Megaflo" horizontal wall mounted electric water heater	No	1
62	Testing water pipes systems	Item	1
<u>FIRE APPLIANCES ETC</u>			
	<u>"Chubb"</u>		
63	"Everyway" hose reel complete with 30m rubber hose, chromium plated stop cock, shut-off nozzle and wall bracket	No	1
64	9kg Dry chemical fire extinguisher	No	1
65	4,5kg Carbon dioxide fire extinguisher	No	1
<u>WATER SUPPLIES TO FIRE APPLIANCES</u>			
	<u>Galvanized steel pipes</u>		
66	22mm Pipes	m	6
	<u>Extra over Galvanized steel pipes</u>		
67	22mm Bend	No	3

68	22mm Tee	No	4
69	22mm Union	No	1
<u>Sundries</u>			
70	Testing fire water system	Item	1

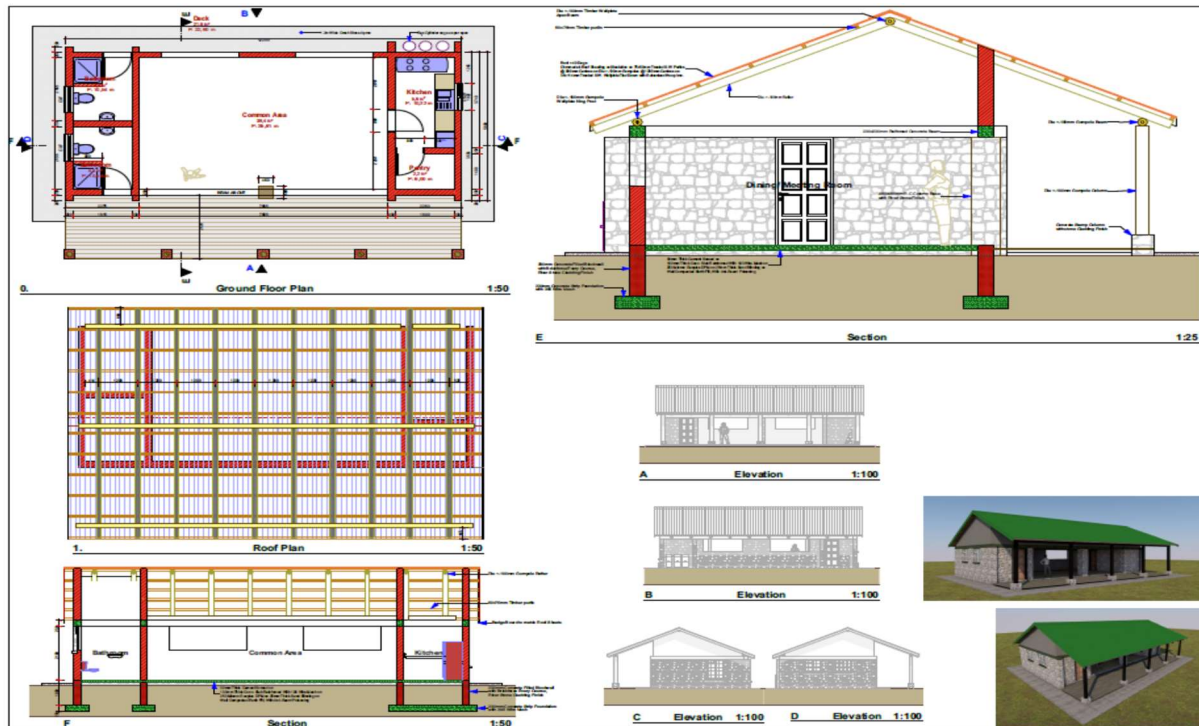
13. Paint work

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
	<u>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</u>		
	<u>Unless otherwise described all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accodance with SANS 1091</u>		
<u>EXTERNALLY</u>			
	<u>One coat acrylic fillercoat and two finishing coats "Dulux" acrylic PVA paint on:</u>		
1	On external walls	m ²	7
2	On narrow widths	m ²	1
<u>INTERNALLY</u>			
	<u>One coat acrylic fillercoat and two finishing coats "Dulux" acrylic PVA paint on:</u>		
3	On internal walls	m ²	115
4	On narrow widths	m ²	2
<u>ON PLASTER BOARD</u>			
	<u>One alkali resistant primer and two coats polyacrylic emulsion paint</u>		
5	On fascia boards	m	10
6	On window cills	m	2
<u>ON METAL</u>			
	<u>Spot priming defects on pre primed surfaces with zink chromate primer and applying one under coat and two coats alkyd enamel paint on steel</u>		
7	On Window frame	m ²	5
8	On window frames including burglar bars	m ²	8
<u>ON WOOD</u>			
	<u>One under coat and two coats high gloss alkyd enamel paint</u>		
7	On doors	m ²	60

14. External works

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>Excavation in earth not exceeding 2.00m deep including gravel road</u>			
1	Open excavation in cut to fill to formation level including compaction to 95% Mod ASSHTO density in layers not exceeding 300mm in cut to fill	m ³	7

2	Surplus material from stock piles to a dumping site to be located by the Contractor with the engineer's approval including haulage exceeding 1km	m ³	7
<u>Earth filling supplied by the Contractor under pavings and gravel road etc</u>			
3	Over site of G6 material in accordance with SABS 1200 DM compacted to 98% Mod ASSHTO density	m ³	5
4	Crush stones well spread	m ²	45
5	Rip the formation level to a depth of 150mm and re-compact to 95% Modified AASHTO density including working around walls and allowing for any extra selected dry earth filling required to maintain levels	m ²	45
<u>Ant repellent</u>			
6	Saturate ground under solid floors and trenches, etc. with ant poisoning consisting of a 5% solution of Pentachlorophenol in mineral oil, sprayed or poured onto ground with a can with a coarse rose using 4 litres of mix ture to each square metre of surface area.	m ²	45
7	Allow for the provision of density tests to be carried out by the Contractor and pay all charges in connection therewith.	Item	1



Annexure 3

Lots: Dormitory & toilets

1. Earthworks

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>EARTHWORKS (PROVISIONAL)</u>			
	1.0 Rates for formwork shall include for any necessary working space and for the insersion and removal of formwork to sides of column bases.		
	2.0 In the event such that ground conditions are such that formwork is not required, the appropriate items shall be adjusted accordingly.		
	Description of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or , altanatively, from stock piles situated on site.		
	It is expected that all excavation will take place in pickable material interspersed with soft and hard rock.		
	<u>Excavate in compacted pickable material as defined not exceeding 2 m deep below reduced or filled up ground level, part return, fill in and ram and remainder deposit on site where directed.</u>		
1	Excavate for surface trenches	m ³	65
2	Excavate for holes	m ³	1
3	Thickenings to surface beds	m ³	17
<u>Risk of collapse of excavations</u>			
4	Sides of trench and hole excavations not exceeding 1.5m deep	m ²	164
	<u>Extra over trench and hole excavations in earth for excavation in</u>		
5	Soft rock	m ³	5
6	Hard rock	m ³	6
7	Surplus material from excavations and stock piles to a dumping site to be located by the Contractor including haulage exceeding 5.0Km with the Engineer's approval	m ³	66
<u>Earth obtained from excavations and or / prescribed stockpiles compacted to 98% Mod. AASHTO maximum density</u>			
9	Backfilling to trenches, column bases, holes, etc.	m ³	25
10	Rip the formation level to a depth of 150mm and re-compact to 95% Modified AASHTO density including working around walls and allowing for any extra selected dry earth filling required to maintain levels	m ²	60
<u>Ant repellent</u>			
11	Saturate ground under solid floors and trenches, etc. with ant poisoning consisting of a 5% solution of Pentachlorophenol in mineral oil, sprayed or poured onto ground with a can with a coarse rose using 4 litres of mix ture to each square metre of surface area.	m ²	224
12	Allow for the provision of density tests to be carried out by the Contractor and pay all charges in connection therewith.	Item	1

2. Concrete

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
	The costs of making, storing and testing of concrete tests cubes as required under clause 7 "Tests" os SABS G shall include the cost of prociding cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independant firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately)	-	

	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16.5mm ring from a minimum which fails to pass a 4.75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated	-	
	"Form cement" lightweight concrete is to have a density of 600/m3 for the top 50mm and 400Kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm	-	
	"Celbeton" lightweight concrete is to have a density of 1000/m3 for the top 20mm and 480Kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 30mm	-	
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and reconditioning as necessary before re-use	-	
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself	-	
	Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described	-	
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>15MPa/ 19mm Concrete in:</u>	-	
1	Surface blinding under trenches	m ³	3
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/ 19mm Concrete</u>		
2	Strip footings	m ³	5
3	Surfaces beds cast in panels on waterproofing	m ³	4
<u>REINFORCED CONCRETE</u>			
	<u>25MPa/ 19mm Concrete</u>		
4	Ring beams	m ³	2
5	Making and testing 150 x 150 x 150mm concrete strength test cubes	no.	24
<u>CONCRETE SUNDRIES</u>			
	<u>Finish top of surfaces of concrete smooth with wood float</u>		
6	Surface beds, slabs, etc	m ²	40
<u>Fabric reinforcement</u>			
7	Type 395 fabric reinforcement in concrete footings, etc	m ²	7
8	Steel mesh reinforcement reference No. 193 in concrete ground slabs, etc. including all laps, bending, cutting, etc. (Measured net).	m ²	40

3. Masonry

Item	Discription	Unit	Quantity
<u>Concrete mosonry units</u>			
	Blocks are either to be solid or hollow modular dense concrete masonry units having a compressive strength of 3.5MPa	-	

	Wall ties shall be polypropylene "permaties" complying with BS 67377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed above each other	-	
	Block work shall comply with SABS 0145 "Concrete masonry construction"	-	
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or any other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be kept open as a weep hole	-	
	Description of block work shall be deemed to include standard complementary blocks such as corner, three quarter, half and quarter blocks required in the construction corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary	-	
<u>DECORATIVE BLOCKS</u>			
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour	-	
	Samples of all masonry building units, except those for walls described as "loading bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30,000 units delivered on site	-	
<u>FOUNDATIONS</u>			
	<u>Blockwork in class I mortar with voids filled solid with concrete</u>	-	
1	230mm Blockwork in foundation walls	m ²	31
<u>Blockwork in class II mortar</u>			
2	230mm Walls	m ²	80
<u>Brick reinforcement (every course)</u>			
3	150mm Wide reinforcement built in horizontally	m	130
<u>Brick reinforcement (every third course)</u>			
4	150mm Wide reinforcement built in horizontally	m	335
<u>WINDOW CILLS</u>			
	<u>Nutec cills by "Everite"</u>	-	
5	15 x 170mm Heavy duty window cills set sloping and slightly projecting	m	8
	<u>Langa Bull Nose cill</u>	-	
6	One row of 150mm wide langa brick cills with bull nose edge set flat and slightly projecting on wall	m	8

4. Masonry

Item	Discription	Unit	Quantity
<u>Concrete mosonry units</u>			
	Blocks are either to be solid or hollow modular dense concrete masonry units having a compressive strength of 3.5MPa	-	
	Wall ties shall be polypropylene "permaties" complying with BS 67377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed above each other	-	
	Block work shall comply with SABS 0145 "Concrete masonry construction"	-	

	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or any other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be kept open as a weep hole	-	
	Description of block work shall be deemed to include standard complementary blocks such as corner, three quarter, half and quarter blocks required in the construction corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary	-	
<u>DECORATIVE BLOCKS</u>			
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour	-	
	Samples of all masonry building units, except those for walls described as "loading bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30,000 units delivered on site	-	
<u>FOUNDATIONS</u>			
	<u>Blockwork in class I mortar with voids filled solid with concrete</u>	-	
1	230mm Blockwork in foundation walls	m ²	31
<u>Blockwork in class II mortar</u>			
2	230mm Walls	m ²	80
<u>Brick reinforcement (every course)</u>			
3	150mm Wide reinforcement built in horizontally	m	130
<u>Brick reinforcement (every third course)</u>			
4	150mm Wide reinforcement built in horizontally	m	335
<u>WINDOW CILLS</u>			
	<u>Nutec cills by "Everite"</u>	-	
5	15 x 170mm Heavy duty window cills set sloping and slightly projecting	m	8
	<u>Langa Bull Nose cill</u>	-	
6	One row of 150mm wide langa brick cills with bull nose edge set flat and slightly projecting on wall	m	8

5. Waterproofing

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
	Waterproofing for roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid even to falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheets or membrane waterproofing shall be deemed to include turn-ups and turn-downs	-	
<u>DAMP PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer 375 micron "Console Plastic Brickgrip DPC" embossed damp proof course</u>		
1	In walls	m ²	8
	<u>One layer 250 micron "Console Plastic Gunplas USB Green" waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"</u>		
2	Under surface beds	m ²	40
<u>JOINT SEALANTS ETC</u>			
	<u>Polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>		
3	10mm In expansion joints in floors (Provisional)	m	50

6. Roof cover

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0.58mm IBR Galvanised mild steel roof sheeting with baked enamel CHROMODECK / COLOMET finish "Aloe Green" in single lengths on timber purlins at 900mm maximum centres in strict accordance with the manufacturer's instructions</u>		
1	Roof Covering with pitch not exceeding 25 ⁰	m ²	110
<u>ROOF AND WALL INSULATION</u>			
	<u>"Sisalation 410" grade glass fibre reinfriced aluminium foil bonded insulation</u>		
2	Insulation laid taut over timber purlins (at approximately 900mm centers) including galvanised straining wire	m ²	110

7. Carpentry

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>CARPENTRY AND JOINERY</u>			
	For Preambles see "Standard Preambles to all Trades"		
<u>ROOF CONSTRUCTION</u>			
	<u>Sawn South African Pine</u>		
1	50 x 75mm Timber purlins	m	128
	<u>Sawn Softwood</u>		
2	100mm Diameter Gumpole rafter	m	71
3	100mm Diameter Gumpole king post	m	30
4	100mm Diameter columns Gum Poles	m	5
5	100mm Diameter beam Gum poles	m	27
6	100mm Diameter Gum pole wall plate	m	13
	<u>Ceiling gum poles</u>		
	20mm diameter gum poles layed in between purlins	m ²	86
<u>DOORS, WINDOWS, SASHES, ETC.</u>			
	<u>Saligna framed, ledged and braced batten doors with tongue and grooved boarding let in flush externally,fitted with hardwood weather strip including hanging in timber frame.</u>		
7	44mm door, size 900 x 2100mm high	No	4
<u>FRAMED FRAMES, ETC.</u>			
	<u>150 x 45mm Rebated "Saligna" frame supplied with cover strips for:</u>		
8	Door, size 900 x 2100mm high.	No	4
<u>FACIAS, BARGE BOARDS, ETC:</u>			
9	12 x 225 mm Fibre cement fascia and barge board drilled and brass screwed and including steel jointing strips between lengths.	m	104
<u>FLOORS, ETC</u>			
	<u>Sawn Softwood</u>		
10	38 x 114mm Floor timber joists in lengths exceeding 3.9m and not exceeding 6.6m	m	12
11	20mm thick timber floor boarding	m ²	11

8. Ironmongery'

Item	Description	Unit	Quantity
	<u>HINGES, BOLTS, ETC Brass</u>		
1	100mm Butt hinges	No	12
	<u>LOCKS"Union"</u>		
2	"Radius Euro Profile" double cylinder lockset ref: CZ692-05-222SC	No	4
	<u>LETTERS, NAMEPLATES, ETC</u>		
3	Plate with symbol Ref SS506E - 06SSE11	No	4
	<u>SUNDRIES</u>		
4	Coat and hat hook ref: AL8722AS	No	3

9. Metalwork

Item	Description	Unit	Quantity
	Descriptions of bolts shall be deemed to include nuts and washers		
	Descriptions of expansion anchors and bolts and cheemical anchors and bolts shall be deemed to include nuts, washers and mortices in blockwork or concrete		
	Metalwork described as "holed for bolt (s)" shall be deemed to exclude the bolts unless otherwise described		
	<u>"Durowin" Heavy duty purpose made pressed steel window frame fitted and including type B33 burglar bars to all sections</u>		
4	Window type C2F, size 1022x949mm high	No	2
5	Window type D52F, size 1022x1540mm high	No	2
6	Window type D54F, size 1511x1540mm high	No	1

10. Plastering

Item	Description	Unit	Quantity
	<u>3 : 1 Cement plaster screed wood floated on concrete</u>		
1	30mm Thick on floors and landings	m ²	40
2	30mm Thick in narrow widths	m ²	6
	<u>INTERNAL PLASTER</u>		
	<u>Cement plaster wood floated on block work</u>		
3	On walls	m ²	87
4	On narrow widths	m ²	2
	<u>EXTERNAL PLASTER</u>		
	<u>Cement plaster wood floated on block work</u>		
5	On walls	m ²	58
6	On narrow widths	m ²	1
	<u>Stone pitching of approximately 200mm diameter river stones tightly packed including preparation of ground surface under:</u>		
7	120mm Thick against sloping banks bedded and jointed in 1:8 cement mortar and pointed with hollow recessed joints	m ²	81
	<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>		
8	3 x 30mm Flat section brass dividing strips between different floor finishes	m	4

11. Tiling

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
<u>WALL TILING</u>			
	Unless described as "fixed with adhesive to (plaster elsewhere)" descriptions of tiling on block or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding		
	<u>245 x 195 x 6mm "Johnsons" carmina range ceramic tiles fixed with approved adhesive to and including plaster backing on block work</u>		
1	On walls	m ²	32
2	On narrow widths	m ²	5
<u>FLOOR TILING</u>			
	<u>300 x 300 x 15mm Ceramic floor tiles bedding on concrete and flush pointed with tinted water proof jointing compound with and including expansion joints at 3.00m centers in both directions</u>		
3	On floors	m ²	8
4	On narrow widths	m ²	1
5	Skirting 100mm high cut from adjacent floor tile	m	15
	<u>300 x 300 x 15mm Porcelain tiles bedding on concrete and flush pointed with tinted water proof jointing compound with and including expansion joints at 3.00m centers in both directions</u>		
6	On floors	m ²	24
7	Skirting 100mm high cut from adjacent floor tile	m	21

12. Glazing

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
<u>GLAZING</u>			
	<u>4 mm Clear float glass</u>		
1	Panes exceeding 1.0m ² and not exceeding 2,0m ²	m ²	6
	<u>4mm Obscure glass</u>		
2	Panes exceeding 0.1 and not exceeding 0.5m ²	m ²	2
<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	<u>6mm Silver float glass copper backed with polished edges fixed with gold plated screw heads at corners</u>		
3	Mirror 600 x 450mm high	No.	3

13. Paintwork

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
	<u>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</u>		
	<u>Unless otherwise described all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accordance with SANS 1091</u>		

<u>EXTERNALLY</u>			
	<u>One coat acrylic fillercoat and two finishing coats "Dulux" acrylic PVA paint on:</u>		
1	On external walls	m ²	7
2	On narrow widths	m ²	1
<u>INTERNALLY</u>			
	<u>One coat acrylic fillercoat and two finishing coats "Dulux" acrylic PVA paint on:</u>		
3	On internal walls	m ²	55
4	On narrow widths	m ²	1
<u>ON PLASTER BOARD</u>			
	<u>One alkali resistant primer and two coats polyacrylic emulsion paint</u>		
	-		
5	On fascia boards	m	10
6	On window cills	m	1
<u>ON METAL</u>			
	<u>Spot priming defects on pre primed surfaces with zinc chromate primer and applying one under coat and two coats alkyd enamel paint on steel</u>		
7	On Window frame	m ²	41
8	On window frames including burglar bars	m ²	8
<u>ON WOOD</u>			
	<u>One under coat and two coats high gloss alkyd enamel paint</u>		
7	On doors	m ²	23

14. Plumbing

Item	Description	Unit	Quantity
	All pipe diameters are nominal external		
	<u>Concrete pipes</u>		
	Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings		
<u>uPVC pipes and fittings</u>			
	Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings		
	Soil, waste and vent pipes and fittings shall be solvent weld jointed		
<u>uPVC pressure pipes and fittings</u>			
	Pipes for water supply shall be of the class stated		
	Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings		
	Pipes of 50mm diameter and greater shall have sockets and spigots with pushing type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints		
<u>Copper pipes</u>			

	Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half hard), Class 2 (half hard) and class 3 (heavy walled half hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground		
<u>Wire gratings</u>			
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings		
<u>Exposed concrete surfaces</u>			
	Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catch pits, inspection chambers, etc shall be finished smooth with plaster		
<u>Excavations</u>			
	No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling		
	"Soft rock" and "Hard rock" shall be as defined in "Earthworks"		
<u>Laying, backfilling, bedding, etc of pipes</u>			
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturer's instructions		
	Where no manufacturer's instructions exist pipes shall be laid in accordance with clause 5,1 and 5,2 of each of the following:		
	SABS 1200 L : Medium-pressure pipelines		
	LD : Sewers		
	LE : Stormwater drainage		
	Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB: Earthworks (pipe trenches)		
	Pipes shall be backfilled in accordance with clauses 3,1 4.1, 5.1 to 5.3 and 7 of SABS 1200 LB: Bedding (pipes)		
	Unless otherwise described bedding of rigid pipes shall be class B bedding		
	Flush pans shall have straight or side outlets and "P" or "S" traps as necessary		
	<u>Stainless steel basins, sinks, wash troughs, urinals, etc</u>		
	Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable		
<u>Waste unions</u>			
	Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings		
1	Contractors are to produce and submit plumbing as built drawings to the Client upon completion	Item	1
2	Sewer Inspection chamber as 1000 x 1000mm internally with 450 x 600mm opening not exceeding 1.0m deep internally	No	5
	Sewer Inspection chamber as 1000 x 1000mm internally with 450 x 600mm opening exceeding 1.0m and not exceeding 2.0m deep internally	No	5
<u>Gratings, Covers, etc</u>			
3	450 x 450mm x 30kg Cast iron dished grating and frame	No	10
<u>SOIL DRAINAGE</u>			
	<u>uPVC pipes</u>		

4	110mm Pipes laid in and including trenches not exceeding 1.00m deep internally	m	40
5	110mm Pipes laid in and including trenches exceeding 1.00m deep internally	m	28
<u>Extra over uPVC pipes for fittings</u>			
6	110mm Bend	No	8
7	110mm Junction	No	8
8	110mm Sockets	No	5
9	110mm Access bend	No	4
10	110mm Vent cowl	No	1
11	110mm ABC rodding eye	No	1
<u>uPVC gulleys</u>			
12	110mm Gully not exceeding 750mm deep internally	No	1
<u>Gratings, covers, etc</u>			
13	450 x 600mm 25kg Cast iron double seal manhole cover and frame	No	10
<u>Sundries</u>			
14	Testing drainage pipe system	Item	1
<u>SANITARY FITTINGS</u>			
15	"Tuscany" close couple WC suite code 571085 comprising of pan with heavy duty double flap seat and cistern complete	No	2
16	"Cameo" vitreous china 595 x 455mm oval self rimming vanity basin Ref: 7028 with and including 1 number tap hole, special overflow Ref: 8784Z0, chain stay-hole complete	No	3
17	CTM Shower tray complete set	No	2
	<u>0.8mm Thick type 18/10 Stainless steel with a single piece pressed lid, welded container with and including cylinder lock and a Franke standard key - satin finish.</u>		
18	Double toilet roll holder Ref: CHRX672	No	2
<u>WASTE UNIONS</u>			
19	38mm Sink waste union	No	3
20	32mm Basin waste union	No	1
<u>TRAPS, VALVES uPVC "Marley"</u>			
21	Grease trap overall size 750 x 500 wide x 750mm deep, comprising of concrete bed walls, covers, including excavations, backfilling and uPVC fittings complete	No	2
	<u>"Cobra Watertech"</u>		
22	32mm 340 CP bottle trap	No	3
	<u>TAPS, VALVES ETC</u>		
23	22mm 1003/125RB gate valve	No	3
24	15mm 1003/121RB gate valve	No	3
25	22mm 126RB stopcock	No	2
26	15mm 211CP Pillar taps	No	4
27	15mm 266CP Sink mixer	No	2
28	PA1.RB "Kwikflo" 400 kPa pressure reducing valve	No	2
29	PB1.10RB vacuum breaker	No	2
<u>SANITARY PLUMBING</u>			

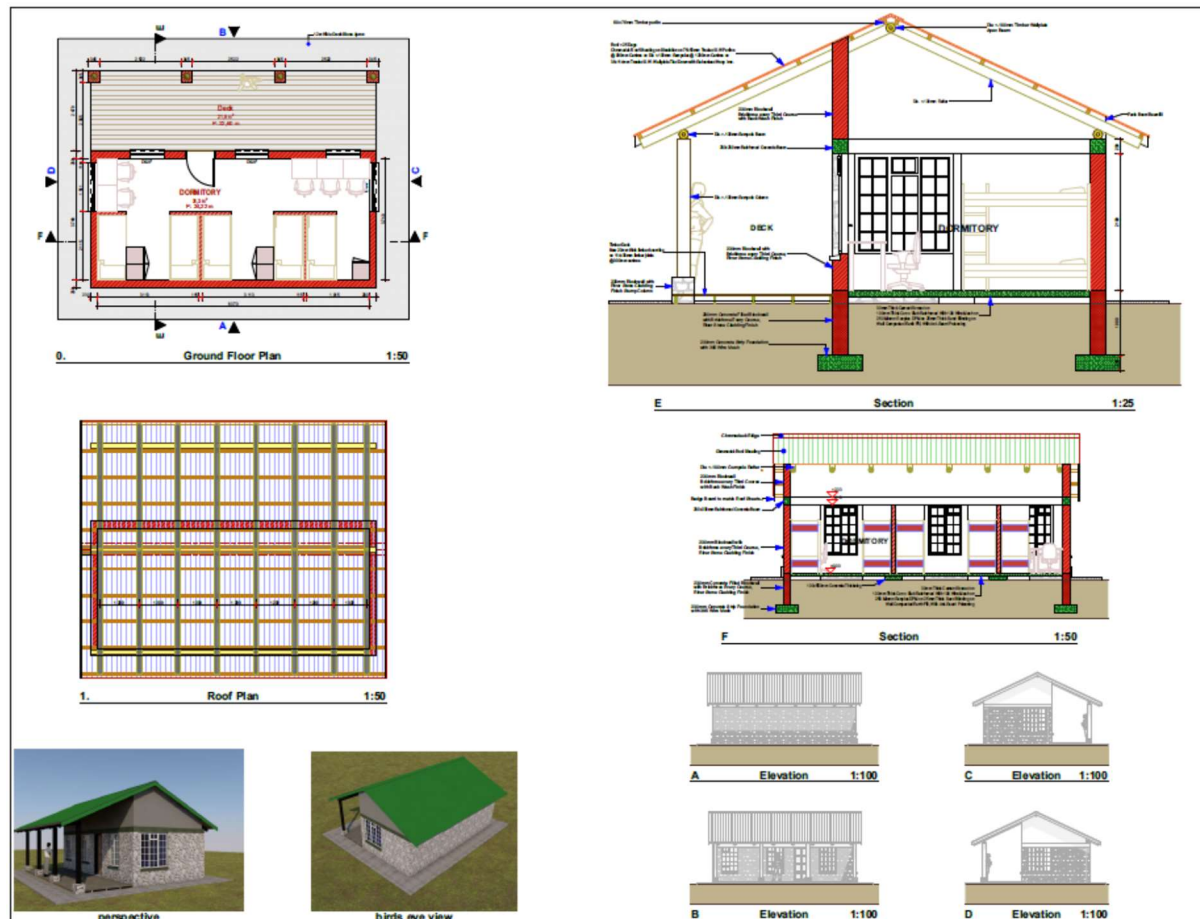
	<u>uPVC pipes</u>		
30	50mm Pipes	m	25
31	110mm Pipes	m	5
32	50mm Pipes laid in and including trenches not exceeding 1.00m deep	m	6
33	110mm Pipes laid in and including trenches not exceeding 1.00m deep	m	9
<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No	5
35	110mm Bend	No	5
36	50mm Junction	No	3
37	110mm Junction	No	3
38	50mm Access bend	No	8
39	110mm Access bend	No	6
40	50mm Access Junction	No	12
41	110mm Access junction	No	9
42	50mm "GI Two-Way" vent valve	No	18
43	110mm "GI Two-Way" vent valve	No	6
<u>Sundries</u>			
44	Testing waste pipe system	Item	1
<u>WATER SUPPLIES</u>			
	<u>Class 12 uPVC pressure pipes</u>		
45	50mm Pipes laid in and including trenches	m	15
46	75mm Pipes laid in and including trenches	m	15
	<u>Extra over uPVC pressure pipes for solvent welded pressure fittings</u>		
47	50mm Elbows	No	2
48	75mm Reducer	No	3
49	50mm Tee	No	8
50	75mm Tee	No	8
51	25 x 50 x 75mm Reducing tee	No	5
<u>Class 1 copper pipes</u>			
52	15mm Pipes	m	8
53	22mm Pipes	m	7
<u>Extra over class 1 copper pipes for capillary fittings</u>			
54	15mm Fittings	No	5
55	22mm Fittings	No	5
<u>Extra over class 1 copper pipes for brass compression fittings</u>			
56	15mm Fittings	No	68
57	22mm Fittings	No	15
<u>Copper overflow and service pipes</u>			
58	22mm Overflow pipe 500mm girth twice bent	No	1
59	15mm Overflow pipe 450mm girth	No	1
<u>Sundries</u>			

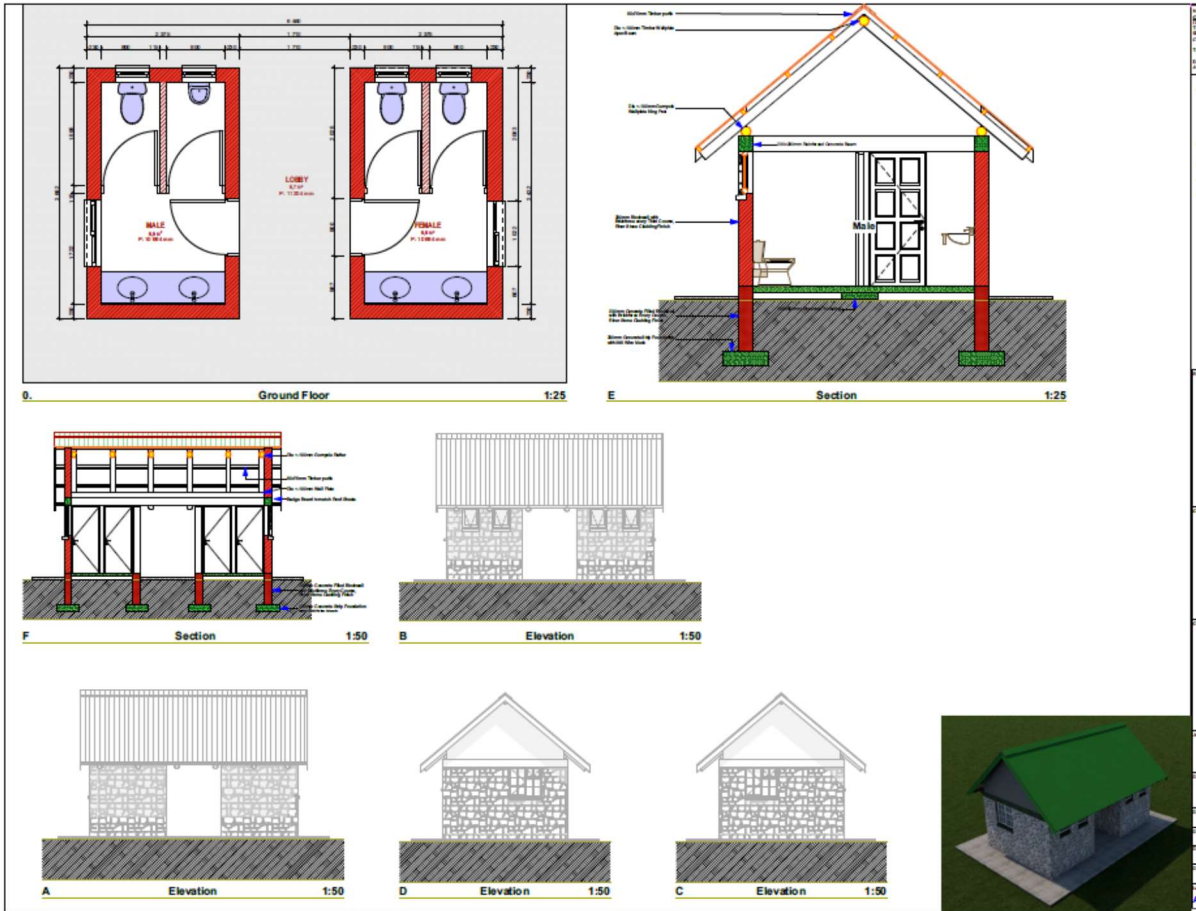
60	460 x 460mm Cast iron stopcock box including brick chamber below not exceeding 750mm deep internally	No	3
<u>ELECTRIC WATER HEATERS</u>			
61	150 Litre "Megaflo" horizontal wall mounted electric water heater	No	1
62	Testing water pipes systems	Item	1
<u>FIRE APPLIANCES ETC</u>			
	<u>"Chubb"</u>		
63	"Everyway" hose reel complete with 30m rubber hose, chromium plated stop cock, shut-off nozzle and wall bracket	No	1
64	9kg Dry chemical fire extinguisher	No	1
65	4,5kg Carbon dioxide fire extinguisher	No	1
<u>WATER SUPPLIES TO FIRE APPLIANCES</u>			
	<u>Galvanized steel pipes</u>		
66	22mm Pipes	m	6
	<u>Extra over Galvanized steel pipes</u>		
67	22mm Bend	No	3
68	22mm Tee	No	4
69	22mm Union	No	1
<u>Sundries</u>			
70	Testing fire water system	Item	1
<u>SEPTIC TANKS</u>			
	<u>Excavate for and build septic tank and soakaway</u>		
71	Septic tank and soakaway combination with 3No. Outfalls / soakaway trenches internal dimensions 2200 long x 1100 wide x 1300mm deep, with and including 150mm thick surface bed with mesh ref 193 and 230mm concrete filled 5Mpa blockwork and 125mm reinforced 25Mpa slab to falls.	Item	1
72	Carry out percolation test in strict accordance with the Architect's entire satisfaction.	Item	1
73	Complete testing of foul water drainage systems	Item	1

15. External works

<u>Item</u>	<u>Discription</u>	<u>Unit</u>	<u>Quantity</u>
<u>Excavation in earth not exceeding 2.00m deep including gravel road</u>			
1	Open excavation in cut to fill to formation level including compaction to 95% Mod ASSHTO density in layers not exceeding 300mm in cut to fill	m ³	5
	<u>Extra over all excavations for carting away</u>		
2	Surplus material from stock piles to a dumping site to be located by the Contractor with the engineer's approval including haulage exceeding 1km	m ³	5
	<u>Earth filling supplied by the Contractor under pavings and gravel road etc</u>		
3	Over site of G6 material in accordance with SABS 1200 DM compacted to 98% Mod ASSHTO density	m ³	5
4	Crush stones well spread	m ²	26
<u>Surface treatment</u>			

5	Rip the formation level to a depth of 150mm and re-compact to 95% Modified AASHTO density including working around walls and allowing for any extra selected dry earth filling required to maintain levels	m ²	33
Ant repellent			
6	Saturate ground under solid floors and trenches, etc. with ant poisoning consisting of a 5% solution of Pentachlorophenol in mineral oil, sprayed or poured onto ground with a can with a coarse rose using 4 litres of mix ture to each square metre of surface area.	m ²	33
7	Allow for the provision of density tests to be carried out by the Contractor and pay all charges in connection therewith.	Item	1





Annexure 4

	KHELEKHELE CAMP SITE DOMESTIC WATER SUPPLY SYSTEM		
Item	Description	Unit	Quantity
A	BOREHOLE GEOPHYSICAL SURVEYS		
1.2	BOREHOLE GEOPHYSICAL SURVEYS		
	Carry out a water divining/dowsing survey: Investigate availability of ground water and mark coordinates		
1.21	Divining/dowsing Survey, Mark Coordinates, peg potential BH location(s). Survey must be conducted within the site boundaries and to a radius of 3km around the camp site where required,	Sum	1
1.22	Compile, submit 3 hard + soft copy (ies) and present report	Sum	1
B	BOREHOLE DRILING AND PUMP TESTING		
1	BOREHOLE DRILLING		
	Carry out application in accordance with Technical Specification: Manufacture, supply, deliver, install, excavate, construct, backfill, paint, finish, commission, test and attend to defects the following items:		
1.1	Mobilisation and Demobilisation	Sum	1
1.2	Confirm Accuracy of Hydrogeologist in locating borehole sites before drilling	Sum	1
1.3	Drilling charge: bore dia 152mm	m	120
1.4	Extra over drilling charge for highly abrasive rock	m	20
1.5	Extra over for unconsolidated formations	m	30
	Extra over for drilling aids		
1.6	a) Foam	Sum	1
1.7	Casing to be supplied: Diameter 150mm ID minimum		
1.7.1	a) Plain steel, 4mm wall thickness	m	50
1.7.2	b) Perforated (well screen), 4mm wall thickness	m	10
1.7.3	c) 140mm PVC Tee Kee	m	6

1.7.4	d) Perforated (well screen), 140mm PVC Tee Kee	m	6
1.8	Casing installation	m	120
1.9	Backfilling and grouting	Sum	1
1.10	Air flushing	hr	1
2	DEVELOPMENT		
2.1	Disinfection	No	1
2.2	Borehole test pumping in accordance to PS 7.4	Sum	1
2.3	Water sampling for quality tests to be performed by AN APPROVED TESTING LAB	Sum	1
C	BOREHOLE DEVELOPMENT		
3	BOREHOLE PROTECTION		
3.1	Precast concrete ring class A 1000mm DIA 625mm long sitting in 10mm wide and 50mm deep groove formed in concrete base. Refer to drawing MPP/01	Sum	1
3.2	Precast reinforced concrete cover with two lifting handles, incl Enkhangala slab, cover and locking device and pedlock	Sum	1
4	PUMP AND ELECTRICALS		
	Carry out the following operation as applicable: Supply, deliver, install, commission, test and attend to defects the following items:		
4.1	Provisional Sum for Solar Borehole submersible pump or similar approved. Supply and install complete all in accordance with these specifications: Well – 60 m, Solar panel – 16pcs 320W.	Sum	1
4.2	Provisional Sum for Electrical Connection of solar water pump.	Sum	1
4.3	Construction of standpipe, soakway and valve chamber	Sum	1

5 30m3 OASIS PLASTIC STORAGE TANKS AND STANDS			
	Carry out the following operation as applicable: Install tank on elevated tank stand, plumb tank, connect pump to existing pipeline, connect existing pipeline to tank and connect tank outlet to existing stand pipe.		
5.1	Erect 10,000 litres Oasis water tank, or similar approved	No.	3
5.2	Connect 50mm GMS pipe on inlet, overflow and outlet of all tanks and connect to common delivery manifold incl. cut pipes, threading, unions and bends, etc.	Sum	1
	50mm dia equilibrium float valve to be fitted on inlet pipe, including fittings. All 3 reservoir must be connected with one 50mm GMS balancing pipe	Sum	1
5.3	Manufacture, supply, deliver and erect 10m ³ tanks steel stands. Specifications as per attached drawing.	No.	3
	Class 20MPa/19mm aggregate concrete tank stand plinth as per drawing, incl. reinforcement	m ³	10
5.4	Smooth vertical formwork to sides of reservoir plinths / slab	m ²	50
5.5 MEDIUM PRESSURE PIPES			
	Carry out the following operation as applicable: Supply, deliver, install including relevant couplings and/or other fittings, commission, test and attend to defects the following items:		
5.51	HDPE Type Class 10 SABS, 63mm	m	100
5.52	HDPE Type Class 16 SABS, 50mm	m	200
5.53	HDPE Type Class 10 SABS, 40mm	m	300
5.54	HDPE Type Class 10 SABS, 32mm	m	100
5.55	Air Valves, incl cut pipes, fittings and vertical distance pieces where necessary		
5.56	50mm Double orifice Air Valve, incl. ball valve, cut pipes and associated fittings	No.	1

5.57	Valve Chamber as per Drawing No. RWSB/P/03 incl enkhangala slab and cover	No.	1
5.58	MAKER BLOCKS		
5.59	Supply and install RWSB/P/04 pipe line maker, every 100m	No.	15
6	MISCELLANEOUS WORKS		
6.1	Sterilising Tanks	Sum	1
6.2	Allow sum for testing and commissioning the whole system	Sum	1
6.3	Compilation and supply of an operation and maintenance manual and AS-Built Drawing.	Sum	1
6.4	Onsite training and instruction of operators over a period of 8 hours, in the operation, maintenance and repair of all components. Certificate to be issued to attendees.	Sum	1

Annex 2

FORM FOR SUBMITTING SUPPLIER'S QUOTATION³

(This Form must be submitted only using the Supplier's Official Letterhead/Stationery⁴)

We, the undersigned, hereby accept in full the UNDP General Terms and Conditions, and hereby offer to supply the items listed below in conformity with the specification and requirements of UNDP as per RFQ Reference No. _____:

TABLE 1 : Offer to Supply works Compliant with Technical Specifications and Requirements

Item No.	Description/Specification of Goods	Latest Delivery Date	Total Price per Lot
	Lot 1		
	Lot 2		
	Lot 3		
	Lot 4		
Total all-inclusive price for all offered lots			

IMPORTANT NOTE:

Please fill in the attached breakdown of cost in Annex 3 (excel file) for each lot. This is a mandatory requirement.

³ This serves as a guide to the Supplier in preparing the quotation and price schedule.

⁴ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

TABLE 2 : Offer to Comply with Other Conditions and Related Requirements

Other Information pertaining to our Quotation are as follows :	Your Responses		
	<i>Yes, we will comply</i>	<i>No, we cannot comply</i>	<i>If you cannot comply, pls. indicate counter proposal</i>
Delivery Lead Time			
Warranty and After-Sales Requirements			
a) Minimum one (1) year warranty on both parts and labor			
Validity of Quotation			
All Provisions of the UNDP General Terms and Conditions			
Acceptance of submission of performance security valid for the warranty period			

All other information that we have not provided automatically implies our full compliance with the requirements, terms and conditions of the RFQ.

[Name and Signature of the Supplier's Authorized Person]
[Designation]
[Date]