

Item No		Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>BILL No. 1</u>			
	<u>PRELIMINARIES</u>			
1	Site Establishment F:..... V:..... T:.....			
		Item		
2	Supervision F:..... V:..... T:.....			
		Item		
3	Guarantees and insurances F:..... V:..... T:.....			
		Item		
4	Plant and equipment F:..... V:..... T:.....			
		Item		
5	Safety and security F:..... V:..... T:.....			
		Item		
6	The Site: Existing premises occupied F:..... V:..... T:.....			
		Item		
7	Programme of the works F:..... V:..... T:.....			
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8 **Progress & Technical Meetings**

F:..... V:..... T:.....

Item

9 **Samples of materials**

F:..... V:..... T:.....

Item

10 **Enclosure of the works**

F:..... V:..... T:.....

Item

11 **Main Notice Board**

F:..... V:..... T:.....

Item

12 **Temporary Services: Water**

F:..... V:..... T:.....

Item

13 **Temporary Services: Electricity**

F:..... V:..... T:.....

Item

14 **Temporary Services: Telecommunications**

F:..... V:..... T:.....

Item

15 **Temporary Services: Ablutions**

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SPECIFIC PRELIMINARIES

16 LOCAL LABOUR

It is a general requirement of this contract that persons normally resident in the locality of the works (local labour) be given preference for employment on the contract. Provided, however, that should adequate and appropriate labour not be available within the locality, other may be employed subject to satisfactory proof being provided that every reasonable endeavour has been made to employ local labour. The Contractor shall identify the local community leaders with the purpose of negotiating with them regarding the utilization of local labour in the construction process. In this regard, the Contractor shall furthermore give preference, wherever possible to the employment of single heads of households, women and youth. The Contractor shall, in general, maximize the involvement of the local community.

F:..... V:..... T:.....

Item

17 Occupational Health and Safety Act No. 85 of 1993

Bidders are to allow for costs in providing and implementing a "Construction Phase Safety, Health and Environmental Plan". Bidders are further reminded that it is their responsibility to amend their safety plan if the assessed risk of the work changes in the slightest manner.

F:..... V:..... T:.....

Item

SUMMARY OF CATEGORIES

18 SUB - TOTAL: FIXED ITEMS

Item

19 SUB - TOTAL: VALUE - RELATED ITEMS

Item

20 SUB - TOTAL: TIME - RELATED ITEMS

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	<u>SECTION 2</u>			
	<u>BILL No. 1</u>			
	<u>TEMPORARY WORKS (PROVISIONAL)</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	<u>TEMPORARY BARRIERS, SCREENS, ETC</u>			
	<u>Temporary barriers, screens, etc including removal upon completion</u>			
1	SANS approved weld mesh type temporary barrier fencing 1,8m high fixed to and including 100mm diameter gum poles set securely min 300mm deep in ground at maximum 3m spacing including excavation, backfilling, etc	m	390	
2	Extra over mesh fence for pedestrian gate size 0,9 x 1,8m high.	No	1	
3	Extra over mesh fence for vehicular gate size 5.5 x 1,8m high.	No	1	
	<u>DEMOLITIONS</u>			
	<u>Remove and clear rubble</u>			
4	Removing and clearing rubble or remains of the 3 x classroom prefabricated structure(150m2) that has completely collapsed, including levelling the ground surface.	No	1	
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<p><u>SECTION 3</u></p> <p><u>BILL No. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Nature of material to be excavated:</u></p> <p>The material to be excavated is assumed to be predominantly of a composition that will allow excavation in "earth" as specified, but including a percentage of excavation in "soft rock" and "hard rock".</p> <p><u>Carting away of excavated material:</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site.</p> <p><u>Dewatering of excavations:</u></p> <p>The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water</p>			
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<p>Section 3 Bill No. 1 Earthworks (Provisional)</p>			

	Imported fill:			
	"Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively"			
	<u>EXCAVATION OTHER THAN BULK</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
1	Trenches.	m3	77	
2	Reduce levels.	m3	129	
	<u>Extra over excavation in:</u>			
3	Soft rock.	m3	60	
4	Hard rock.	m3	41	
	<u>Extra over all excavations for carting away:</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	206	
	<u>Risk of collapse of excavations:</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	207	
	<u>Keeping excavations free of water:</u>			
7	Keeping excavations free from mud and all water including subterranean sources.		Item	
	<u>EARTH FILLING, ETC.</u>			
	<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93% Mod. AASHTO density:</u>			
8	Backfilling to trenches, holes, etc.	m3		
	<u>Earth filling (G5 material) supplied by the contractor compacted to 95% Mod AASHTO density:</u>			
9	Under floors, steps, footings, etc.	m3	143	
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<u>Coarse river sand filling supplied by the contractor:</u>					
10	Under floors etc. (Provisional).	m3	8		
<u>Compaction of surfaces:</u>					
11	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density.	m2	264		
<u>Prescribed density tests on filling:</u>					
12	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	5		
<u>SOIL POISONING</u>					
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>					
13	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m2	264		
14	To bottoms and sides of trenches, holes, etc.	m2	353		
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<p><u>BILL No. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Cost of tests:</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing 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).</p> <p><u>Formwork:</u></p> <p>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 for reconditioning as necessary before re-use.</p>			
<p>Carried to Collection</p>			R
<p>Section 3 Bill No. 2 Concrete, Formwork and Reinforcement</p>			

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.

Formwork to sides of bases, pile caps, ground beams, etc., will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks.

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UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES

15Mpa/19mm Concrete

1	Surface blinding under footings and bases.	m3	7
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REINFORCED CONCRETE CAST ON/IN FORMWORK

30MPa/20mm concrete:

2	Surface beds on waterproofing.	m3	39
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3	Strip footings.	m3	20
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TEST BLOCKS

Test blocks:

4	Making and testing set of three 150x150x150mm concrete strength test cubes (Provisional).	No	150
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FINISHING TOP SURFACE OF CONCRETE

Finishing top surfaces of concrete with a wood float:

5	Surface beds, slabs, etc	m2	264
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SMOOTH FORMWORK (DEGREE OF ACCURACY III)

Smooth Formwork to Sides:

6	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	32
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MOVEMENT JOINTS ETC

Vertical construction joints through concrete including thick cement slurry to one face:

7	Surface beds not exceeding 300mm thick	m	266
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	<p><u>BILL No. 3</u></p> <p><u>MASONRY</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Sizes in descriptions:</u></p> <p>Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.</p> <p><u>Face bricks:</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour.</p> <p><u>Pointing:</u></p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, and cleaning etc.</p> <p><u>Samples, etc:</u></p> <p>Rates for brickwork, faced brickwork, etc shall include for all required samples.</p>			
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Concrete masonry units:

Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7 MPa

Wall ties for blockwork:

Wall ties shall be polypropylene "Permaties" complying with BS 76377. 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 vertically above each other

Blockwork:

Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"

Surfaces shall have joints raked out to a depth of at least 10mm and pointed on exposed surfaces. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole.

Standard complementary blocks:

Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary

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<u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u>				
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>				
1	One brick walls.	m2	47	
<u>BRICKWORK IN SUPERSTRUCTURE</u>				
<u>Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar:</u>				
2	One brick walls.	m2	267	
3	Half brick wall in beam filling including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.	m2	37	
<u>BRICKWORK AND BLOCKWORK SUNDRIES</u>				
<u>Bagging of 1:3 cement and sand mixture</u>				
4	On brick walls, piers, etc	m2	208	
<u>Brickwork reinforcement:</u>				
5	230mm Wide reinforcement built in horizontally.	m	902	
6	Ditto, but in foundations (Provisional).	m	277	
<u>Prestressed fabricated concrete lintels including necessary temporary supports</u>				
7	115 x 75mm Lintels in lengths not exceeding 3m.	m	42	
<u>Turning pieces:</u>				
8	200mm Wide turning piece to lintels etc.	m	110	
<u>Cramps, ties, etc:</u>				
9	30 x 1.6mm Galvanized roof tie 1600mm long with one end fixed to timber and other built into brickwork or concrete.	No	104	
<u>Miscellaneous:</u>				
10	Fair raking cutting.	m	56	
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FACE BRICKWORK

" Golden wheat travertine FBX" clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2:

11	Extra over brickwork for face brickwork externally.	m2	208
12	Half brick wall in beam filling pointed one side including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.	m2	36
13	Fair raking cutting.	m	56

Brick-on-edge header course copings, sills, etc, of "Golden wheat travertine FBX " or equal approved clay face brick size 222 x 106 x 73mm, pointed with recessed joints on all exposed faces:

14	220mm Wide lintel pointed on face and 110mm soffit.	m	30
15	220mm Brick on edge sill bedded sloping and jointed in cement mortar and pointed on top, edge and projecting soffit including cutting and fitting between reveals and splay cutting brickwork under.	m	27

FIBRE-CEMENT WINDOW SILLS

Natural grey Nutec sills in single lengths bedded in class 1 mortar including metal fixing lugs, etc

16	150 x 15mm Wide sills set flat and slightly projecting	m	27
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	<p><u>BILL No. 4</u></p> <p><u>WATERPROOFING</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>DAMPPROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u></p>			
1	Under surface beds.	m2	264	
	<p><u>One layer of 375 micron embossed dampcourse waterproof sheeting below walls, sills, etc:</u></p>			
2	Below walls, sills, etc.	m2	16	
	<p><u>Two coats "Brixéal" bitumen emulsion waterproof coating</u></p>			
3	On bagged brick walls	m2	208	
	<p><u>JOINT SEALANTS ETC</u></p> <p><u>Clear Neutral silicone sealant:</u></p>			
4	In joint sealing and pointing all round external window and door frames.	m	140	
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5	<p><u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u></p> <p>10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).</p>	m	490		
<p>Section 3 Bill No. 4 Waterproofing</p>		<p>Carried to Collection</p>			<p>R</p>

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	<p><u>BILL No. 5</u></p> <p><u>ROOF COVERINGS ETC.</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Fixing:</u></p> <p>Fixing shall be done according to SABS 1200HB with minimum 225mm end laps.</p> <p><u>Guarantee:</u></p> <p>The contractor will be required to provide a written guarantee, stating that :1. The roof sheeting is of the specified thickness.2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years.</p> <p><u>Pricing:</u></p> <p>Prices for roof covering and cladding are to include for all necessary drive screws, hook bolts, sheet bolts, nuts, washers, etc., for drilling holes for screws and bolts including removing all swarf from the sheeting and all right angle cutting and waste (Measured net).</p>			
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PROFILED METAL SHEETING AND ACCESSORIES

0.6mm thick corrugated roof sheeting with "globalcoat" finish on one side in single lengths fixed to 50 x 75mm timber purlins at maximum 1140mm cc and 0.6mm galvanized sheet steel accessories with globalcoat" finish on one side 38x114mm wall plates, 38 x114mm bracing, 38x114mm prefabricated roof trusses at max 1150mm cc as per specialist, 50x75mm timber purlins, 76x76mm splayed eaves purlins. purlins/rafters all in accordance with manufacturer's recommendations

1	Roof covering with pitch not exceeding 25 degrees.	m2	317
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0.6mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's recommendations:

2	Ridge 550mm girth with minimum 225mm laps, fixed to roof sheeting (measured net).	m	30
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3	Standard narrow and broad flute closers.	m	61
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ROOF INSULATION

Reflective foil insulation or equal approved 420 Heavy industrial grade reinforced aluminium foil insulation double sided, heavy grammage reflective foil laminate incorporating eight layers of aluminium foil, reinforcing scrim, Kraft paper and polyethylene, tested for conformance with SABS 1381: Part IV- 1985, with a Class 1 fire rating in accordance with SABS 0177: part III - 1981 and BS 476 part 5, 6 and 7, secured to each truss/rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll. All to be fixed in accordance with manufactures specification

4	Insulation laid taut over timber purlins (at approximately 700mm centres) and fixed concurrent with purlins, etc.	m2	317
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<p><u>BILL No. 6</u></p>			
<p><u>CARPENTRY AND JOINERY</u></p>			
<p><u>MODEL PREAMBLES</u></p>			
<p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>ROOFS ETC</u></p>			
<p><u>MONOPLANAR PREFABRICATED METAL CONNECTED TIMBER ROOF TRUSSES</u></p>			
<p>All trusses to be fabricated in a factory by a truss fabricator who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p>			
<p>TR1 & TR2 Certificates are to be issued for each Block before occupation may take place</p>			
<p><u>PREFABRICATED ROOF TRUSSES HAVING A PITCH NOT EXCEEDING 25 DEGREES</u></p>			
<p>NOTE: All timber roof trusses including nail-plated trusses and bolted trusses with lapped members must comply with SABS 0243 : THE DESIGN, MANUFACTURE AND ERECTION OF TIMBER TRUSSES</p>			
<p>Prices for roof trusses are to include for all temporary bracing and supports and for all necessary top and bottom chord bracing, wind bracing and runners where required and TR1 and TR2 Certificates</p>			
<p><u>TIMBER</u></p>			
<p>Timber for trusses to be South African softwood structural timber and shall be at least of grade 4 and in accordance with SABS Specification No.'s 563 or 1245 or laminated timber in accordance with SABS 1460</p>			
<p>Carried to Collection</p>			
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METAL CONNECTOR PLATES

Metal truss connector plates shall be made from galvanised steel of at least 1mm nominal thickness, with a minimum yield strength of 250MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be 0,275Kg/m² commercial class hot dipped galvanising

The connector plates shall have been tested by the CSIR and be a size capable of transmitting the forces between the members of a truss without exceeding the design values given in the CSIR report

BOLTS

Bolts shall be to BS 4190 or SABS 135 with appropriate washers. (See below)

WASHERS

Square or round washers of the following minimum dimensions shall be used with all bolts:

WASHER DIMENSIONS

Bolts Size	Width (mm)	Thickness
up to M8	25	2,5
up to M12	36	4,0
up to M20	60	5,0

SHEAR PLATES, TOOTH CONNECTORS AND SPLIT RINGS

These shall be as specified in BS 1579 and installed in accordance with the CSIR Publication : HOUT 468, "The Design, Manufacture and Erection of Timber Trusses".

NAILS

These shall be in accordance with SABS 820 : 1974

TRUSS CONSTRUCTION

The trusses shall be constructed to ensure the correct profile, overhangs and cambers

All joints are to be close fitting butt joints made by precision pressing of the metal connector plates into each side of the joint

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Carpentry and Joinery

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TRUSS DESIGN

All trusses shall be designed by a registered Professional Engineer employed by the Contractor in accordance with the SABS Code of Practice for the Design of Timber Structures SABS 0163 and the Code of Practice for General Procedures and Loadings SABS 0160

TRUSS SPACING

The truss centres shall be less than or equal to that described in the Bills for each respective truss type

DRAWINGS

Prints shall be provided to the consulting engineer/ architect for approval. These drawings shall be signed by a Professional Engineer

The following minimum information shall be supplied:

- * Details of the roof system with the positions of all trusses and beams clearly indicated
- * Bracing details
- * All truss details, including valley trusses where applicable, with the following clearly detailed:-
 - All member sizes and grades
 - Connector plate sizes for all truss joints. Code numbers are deemed sufficient
- * All connection and hold down details between trusses, girders, beams and supports
- * The type of roof covering, ceiling and any other loads taken into account in the design

The dimensions in the descriptions of trusses are nominal and verification measurements are to be obtained from site before design or fabrication commences, and must be designed in accordance with the environmental conditions of the area

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GENERAL

The following schedule of prices includes all timber of the required grade and type shown on the designs, all cutting and waste, cutting to exact length and end angles necessary to manufacture the respective truss types, the supply of all connector plates, fabrication of the trusses, checking the completed truss for quality, as well as loading, transporting to the site and offloading

The trusses must be suitable stored and protected on site as directed by the Secretary or his Representative

ERECTION

The trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the Manual "The Erection and Bracing of Timber Roof Trusses" published by the Institute for Timber Construction and the Council for Scientific and Industrial Research of as detailed by the designer of the SABS Code of Practice: "The Design, Manufacture and Erection of Timber Roof Trusses"

TRUSS LOADING

The trusses shall be designed for:

- * Roof Cover: 0,53mm Metal roof sheeting
- * Max Purlin centres: 1250mm
- * Ceilings: Plasterboard ceilings
- * Overhang: Min 600mm

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Section 3
 Bill No. 6
 Carpentry and Joinery

TRUSSES

- a. All the roof trusses to be constructed as shown on the roof plans.
- b. All the roof trusses to be designed and constructed with softwood structural timber to include for live loads, wind loads and to take corrugated roof covering, purlins and fibre cement or plasterboard ceilings with brandering. Each roof truss shall have all its members accurately cut and close butted together and rigidly fixed by CSIR approved patented galvanized metal spiked connectors, fixed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions
- c. Unless otherwise described all rafter feet are to extend 600mm beyond the length of the tie beam, with ends twice splay cut
- d. Upon completion of the contract the Registered Professional Engineer must issue to the Principal Agent a certificate to the effect that the roof has been erected in accordance with his approved design, under his supervision and that the entire roof is structurally stable. The lump sum price of the roof trusses and purlins or battens (bottom purlin or tilting fillet to be wrought) shall include for the design and supervision by a Registered / Professional Engineer and for all necessary runners, overhangs wrought all round and trimmed and splay cut as required, braces, hoisting and fixing, etc.,but shall exclude fixing brackets and hurricane clips, wall plates, fascia, barge boards, roof coverings, purlins, etc. which are all separately measured
- e. The tenderer's attention is drawn to the fact that the description of the trusses only represents the overall size (fascia to fascia) and not the required design
- f. Erection must be carried out as described in "The Erection and Bracing of Timber Roof Trusses" published by the Truss Plate Association of South Africa Ltd. and the National Timber Research Institute, CSIR
- g. Descriptions of roof trusses shall be deemed to include for design, manufacture, supply, hoisting and fixing in position, trimming ends, notching, etc. and for any temporary bracing

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PREFABRICATED ROOF TRUSSES, ETC.

Plate nailed pitched timber roof construction

Sawn Softwood

1	Design, supply and install roof truss system complete in accordance with the Standard Building Regulations to suit roof area approximate size 316m ² (measured on flat floor area inclusive of overhangs, etc)		Item
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Sawn softwood:

2	38 x 114mm Wall plate.	m	59
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3	50 x 70mm purlins.	m	351
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Sundries:

4	TRI FIX or equal approved hurricane clip fixed using 10 x 32mm galvanised clout nails (Provisional).	No	78
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EAVES, VERGES, ETC

Pressed fibre-cement:

5	12 x 225mm EVERITE NUTEC medium density fibre-cement fascia board (product no (041-202) or equal approved. Aluminium H-Profile fascia joiners (product no 685-1950. Drill and for fix with Hot dipped galvanised screws and washers.	m	64
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6	Extra on last for splay cut end.	No	4
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7	80 x 200mm EVERITE NUTEC fibre cement socketless Barge boards (Product no 521-731) or equal approved. Aluminium H-profile barge board joiners(product No 685-187). drill for and fix with Hot dipped galvanise screws and washers. 76 x 50mm trimmer batten fixed underside of purlin ends for barge board fixing.	m	23
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8	Extra on last for splay cut end.	No	4
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DOORS ETC

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9	<p><u>40mm thick Saligna 'Blaco' Ledge and brace battered door with 40 x 110mm styles and top rail, 20 x 150mm middle ledge, 20 x 225mm bottom ledge and 20 x 110mm braces:</u></p> <p>813 x 2032mm high single door.</p>	No	3	
<p><u>SKIRTINGS</u></p>				
<p><u>SANS Approved Meranti:</u></p>				
10	<p>69mm high Timber skirting screw fixed at 450mm centres, mitered at corners and splayed joints in running lengths, suitable for decoration.</p>	m	116	
<p style="text-align: center;">Carried to Collection</p>				
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Carpentry and Joinery

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Carpentry and Joinery

Item No		Quantity	Rate	Amount
	<p><u>BILL No. 7</u></p> <p><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Descriptions:</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.</p> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as bolted the bolts have been given.</p>			
	Carried to Collection			R
	<p>Section 3 Bill No. 7 Ceilings, Partitions and Access Flooring</p>			

NAILED UP CEILINGS

12mm "Rhinoboard" gypsum plasterboard ceilings fixed to 38x38mm brandering at max 400cc including 'H' profile jointing strips all to manufacturers instructions:

1	Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	m2	180
2	Extra over ceiling for forming trap door size 635 x 635mm in clear formed with 38 x 50mm sawn S.A. pine framing covered with ceiling boarding and set in 38 x 76mm wrought S.A. pine rebated kerb, including trimmers.	No	4
<u>Cornice</u>			
3	75mm gypsum coved cornice.	m	369
<u>100mm thick non-combustible light weight ceiling insulation 12kg/m³ closely fitted with ends butted firmly between tie beams and laid loose on top of brandering between roof timbers, all in accordance with manufacturer's recommendations.</u>			
<u>• R-value: 2,50m² K/W</u>			
<u>• Thermal conductivity: 0,04 W/m²/K</u>			
4	100mm Insulation laid between roof trusses and on top of brandering, etc.	m2	180

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Item No		Quantity	Rate	Amount
	<p><u>BILL No. 8</u></p> <p><u>FLOOR COVERINGS, WALL LININGS, ETC</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Cleaning:</u></p> <p>Rates for floor covering shall include for proper cleaning on completion.</p> <p><u>VINYL FLOOR COVERINGS</u></p> <p><u>2.5mm thick x 300mm x 300mm high quality flexible vinyl floor tiles laid in Marley No.60 Plus acrylic adhesive, or equal approved, spread with trowel having 1.5mm x 1.5mm x 1.5mm triangular notches at 4.00mm centres, colour as approved by architect all as per manufacturer's recommendation</u></p>			
1	On floors.	m2	180	
	<p><u>POLISH, SEALERS, ETC</u></p> <p><u>Scrub with a diluted neutral detergent complying with SABS 825 and thoroughly rinse, Apply three coats of a water based floor dressing complying to SABS 1042 on:</u></p>			
2	Vinyl tile flooring	m2	180	
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	Section 3 Bill No. 8 Floor Coverings, Wall Linings, Etc.			

Item No		Quantity	Rate	Amount
	<u>BILL No. 9</u>			
	<u>IRONMONGERY</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Dorma or equal approved Hinges:</u>			
1	102 x75 x 3mm Two Ball Bearing Butt Hinge (Stainless Steel) - Code DBB-SS-009	Pairs	3.0	
	<u>Union or equal approved Locks:</u>			
2	4 Lever mortice lockset with satin-chrome plated handles Code - CZ682-24-61CH	No	3	
	<u>Union or equal approved Handles:</u>			
3	Dorma or qual approved stainless steel 350 x 32mm "D" straight back-to-back pull handle (Code: DPH213).	Pairs	3.0	
	<u>Union or equal approved Door Stop</u>			
4	Door stop - Code - AL8730AS	No	3	
	<u>Union or equal approved Hat and Coat Hook</u>			
5	Coat hook and Rubber tipper Code - AL8722AS	No	3	
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>			
6	2400 x 1200mm Magnetic white board or equal approved fixed to walls with an approved Aluminium frame, plugged and screwed to walls with counter sunk brass screws and cupped washers.	No	6	
	Carried to Collection			R
	Section 3 Bill No. 9 Ironmongery			

7 Pinning board 4800 x 1200mm High overall of 9mm "Van Dyk" or equal approved pinning board glued to 3mm masonite back plugged and screwed to wall and framed with 70 x 22mm rebated wrought Saligna frame with one vertical middle rail.

No

3

REFUSE CANS

8 240 Litre Plastic (Wheeled) paper refuse can, colour green or similar approved.

No

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Ironmongery

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Ironmongery

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Item No		Quantity	Rate	Amount
	<p><u>BILL No. 10</u></p> <p><u>METALWORK</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Descriptions</p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>NOTE: All steel will be Hot dipped galvanised unless otherwise stated.</p>			
	Carried to Collection			R
	<p>Section 3 Bill No. 10 Metalwork</p>			

ALUMINIUM WINDOWS

All aluminium windows are to be manufactured by manufacturers who are members of AAAMSA. All aluminium systems to be approved by AAAMSA.

All aluminium work is to be protected by covering with plastic sheeting fixed with low tack adhesive prior to leaving the factory. Plastic sheeting is to remain in place during construction.

All glazing shall be in accordance with SABS 0400 - 1990, SABS 1263 - 1. All safety glazing materials (individual panes) shall be permanently marked. Such marking shall be visible after glazing process. If it is not marked, it is not safety glass.

Natural Anodized aluminium windows suitable for coastal conditions, glazed with 6.38mm safety laminated glass including Aluminium burglar bars riveted to aluminium frame, plugged to brickwork:

1	Window size 1000 x 1000mm high complete, including ironmongery etc.	No	12
2	Window size 1000 x 1450mm high complete, including ironmongery etc.	No	15

GALVANIZED PRESSED STEEL DOOR FRAMES

1,2mm galvanised mild steel standard pressed metal double rebated door frame welded with 2 x 100mm galvanised loose-pin hinges, adjustable chrome striking plates complete with straps for building in to suit one brick wall:

3	Frame for door 813 x 2032mm high.	No	3
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HOT DIP GALVANIZED STEEL GATES

Note: The contractor is to check on site measurements before placing of order.

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Section 3
Bill No. 10
Metalwork

4	<p><u>Security Gate consisting of 60 x 40 x 3mm galvanised mild steel frame with 12mm galvanised mild steel square bars infill at equal intervals, hang with one pair of galvanised mild steel hinges including locks, handles, ironmongery complete and fixed to brickwork:</u></p> <p>Security Gate size 1124 x 2217mm high.</p>	No	3	
<p><u>SUNDRY GALVANISED STEELWORK</u></p>				
<p><u>Purpose made roof supports, columns etc.</u></p>				
5	<p>76mm Outside diameter x 6.51kg/m tubular column 2705mm long with 180 x 180 x 8mm base plate welded on to bottom end and top end having 100 x 5mm thick x 375mm girth channel-shaped bracket eight times holed for bolts welded on including setting up in position and embedding bottom end in concrete.</p>	No	12	
<p><u>Wall plate and column connection:</u></p>				
6	<p>100 x 100 x 8 Equal steel angle bolted to column with M24 bolts as per engineers detail.</p>	No	12	
<p><u>STEEL LOCKERS</u></p>				
<p><u>Approved standard epoxy powder coated finish lockers, etc. fixed in position strictly in accordance with the manufacturer's specification:</u></p>				
7	<p>Steel double door stationary cupboard fitted complete with security bar, including 3 shelves, code 'CU50' and 6 times holed for and including fixing to wall with 70 x 10mm diameter expansion anchor and bolt, colour: cream.</p>	No	3	
<p style="text-align: center;">Carried to Collection</p>				
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	<u>BILL No. 11</u>			
	<u>PLASTERING</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	<u>SCREEDS</u>			
	<u>1:3 Cement and sand screeds steel trowelled on concrete:</u>			
1	30mm thick on floors.	m2	180	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork:</u>			
2	On walls.	m2	299	
3	In narrow widths.	m2	13	
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	Plastering			

Item No	Quantity	Rate	Amount
<p><u>BILL No. 12</u></p> <p><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Copper pipes:</u></p> <p>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.</p> <p><u>Chasing:</u></p> <p>Chasing pipes into new walls shall be regarded as "building in" and is not measured separately. The cost of chasing, wrapping in suitable bown paper and making good shall be included in the rates for pipes.</p>			
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<p>Section 3 Bill No. 12 Plumbing and Drainage (Provisional)</p>			

Holes for pipes through new walls:

No allowance for holes and drilling for pipes through new walls has been made in these bills of quantities, the price for all holes and making good shall be deemed to be included in the description of pipes.

Reducing fittings:

Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.

Description of pipes laid in trenches:

Descriptions of pipes laid in trenches shall be deemed to include for carting away all surplus excavated material to a dumping site located by the contractor.

Excavations:

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'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 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 1200DB: Earthworks (Pipe trenches) Clause 5.7.2 will only be applicable if authorised by the Engineer in writing.

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Flush pans:

Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.

Stainless steel basins, sinks, wash troughs, urinals, etc:

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Fixing:

Descriptions of wall mounted, floor standing, drop-in, etc type sanitary fittings shall be deemed to include fixing in position and all fixing accessories.

Descriptions of proprietary items shall include fixing in position and all fixing accessories as specified by the manufacturer.

Waste unions:

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.

Sleeve pipes:

Electrical sleeve pipes to be Class 34 and are to include for draw wires.

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RAINWATER DISPOSAL:

Seamless aluminium gutters

1	100 x 75mm Seamless aluminium OGEE gutter with baked enamel finish fixed to manufactures specification.	m	64
2	Extra eaves gutter for stopped end.	No	4
3	Extra over eaves gutter for outlet for 100 x 75mm Aluminium downpipe.	No	4
4	100 x 75mm fluted Aluminium downpipe with baked enamel finish fixed to suppliers specification.	m	16
5	Extra over rainwater downpipe for bend.	No	4

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	<p><u>BILL No. 13</u></p> <p><u>PAINTWORK</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p>All work to be executed in strict accordance with the specifications of the paint manufacturer.</p> <p>Where surfaces of plaster etc are sandy / friable, the first coat must be replaced with plaster primer thinned 10% with turpentine.</p>			
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PAINTWORK ETC TO NEW WORK

ON FLOATED PLASTER

Apply one coat DULUX Trade alkali resistant plaster prime followed by two coats of DULUX trade 100 low sheen or equal approved. Colour to Architects Approval.

1	On internal walls.	m2	312	
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ON FIBRE-CEMENT BOARD SURFACES

Apply one coat DULUX Trade alkali resistant plaster prime followed by two coats of DULUX trade 100 low sheen or equal approved coats of finishing paint or equal approved. All joints to be taped, skimmed and rubbed to a smooth finish. Colour to Architects Approval.

2	Ceilings and cornices.	m2	180	
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3	Fascias and barge boards.	m2	35	
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ON METAL SURFACES

Apply one coat zinc chromate undercoat followed by two coats of semi Gloss enamel paint or equal approved. Colour to Architects Approval.

4	Gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	15	
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ON WOOD

Apply one coat DULUX galvanised iron primer, one coat of DULUX universal undercoat followed by two coats of DULUX Gloss enamel paint or equal approved. Colour to Architects Approval.

5	On doors.	m2	12	
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Three coats superior quality clear gloss varnish

6	On doors	m2	11	
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7	Skirtings, rails, frames, etc not exceeding 300mm girth	m	12	
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Section 3
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Paintwork

Prepare and brush surface to remove all loose contaminants and apply two coats of "Carbolineum" wood preserver or equal approved

8 On timber trusses and purlins.

m2

144

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	<p><u>SECTION 4</u></p> <p><u>BILL No. 1</u></p> <p><u>PLATFORMS</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Wherever a trade name for any product has been described in the bills of quantities, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for the submission of tenders.</p> <p><u>Nature of material to be excavated:</u></p> <p>The material to be excavated is assumed to be predominantly of a composition that will allow excavation in earth as specified, but including a percentage of excavation in soft rock and hard rock.</p> <p><u>Carting away of excavated material:</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site.</p> <p><u>Dewatering of excavations:</u></p> <p>The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise.</p>			
	Carried to Collection			R
	Section 4 Bill No. 1 Platforms			

Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water.

Density testing on filling:

Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved.

When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.

BULK EXCAVATION

Open face excavation not exceeding 2m deep:

1	Excavate to cut in open face, not exceeding 2m deep to reduce levels and grade to fill and compact to 93% mod AASHTO density at optimum moisture content.	m3	180
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Extra over bulk excavation in earth for excavation in:

2	Soft rock.	m3	36
3	Hard rock.	m3	18

Extra over all excavations for carting away:

4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	180
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Keeping excavations free of water:

5	Keeping excavations free of water.		Item
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EARTH FILLING, ETC.

Earth filling from excavated material

6	Dig, load and remove filling selected from spoil heaps on site and deposit as filling in platforms including spreading and compacting to cambers and falls in layers not exceeding 150 mm thick to a minimum of 95% Modified AASHTO dry density.	m3	743
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Platforms

Selected earth supplied by the Contractor including haulage (material to comply with Pi <10 GM = 1.2)

7	Over site of G5 base course material compacted to 98% Mod AASHTO density.	m3	180	
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Prescribed density tests on filling

8	Modified AASHTO Density test.	No	30	
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Platforms

COLLECTION

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Amount

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Section 4
 Bill No. 1
 Platforms

Item No		Quantity	Rate	Amount
	<u>BILL No. 2</u>			
	<u>STORMWATER CHANNELS</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	<u>Excavation not exceeding 2m deep</u>			
1	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	30	
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>			
2	Off site to a dumping site to be found by the Contractor.	m3	30	
	<u>Filling supplied by the contractor under channels</u>			
3	G7 Base course material compacted to 98% Mod AASHTO density	m3	15	
4	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m3	15	
	<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>			
5	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m2	100	
	<u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>			
6	Under surface beds.	m2	100	
	Carried to Collection			R
	Section 4			
	Bill No. 2			
	Stormwater reticulation			

Cast in-situ Ref 395 mesh reinforced concrete (25MPa) open stormwater channels having V-shaped waterway formed in top, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 2m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer.

7	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground in 2000mm sections including all formwork, Ref 193 mesh reinforcement, expansion joints, smooth finishing to top of concrete surface etc.	m	100
8	Extra for 700mm angle	No	8
9	Extra for forming 200mm thick 700mm wide spreader with 200mm high edges fanning out to 1 960mm width at furthest end with hard burnt bricks pitching cast in ass diffusers including working off concrete to a smooth finish and draining onto natural ground with 150 - 200mm diameter loose stones.	No	5

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Section 4
Bill No. 2
Stormwater reticulation

Section 4

Bill No. 2

Stormwater reticulation

COLLECTION

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Section 4

Bill No. 2

Stormwater reticulation

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Item No		Quantity	Rate	Amount
	<u>BILL No. 3</u>			
	<u>WATER RETICULATION</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	<u>THE FOLLOWING IN RAINWATER TANKS AND STANDS</u>			
	<u>EARTHWORKS</u>			
	<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
1	Trenches.	m3	16	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
2	Soft rock.	m3	5	
3	Hard rock.	m3	2	
	<u>Extra over all excavations for carting away:</u>			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	9	
	<u>Risk of collapse of excavations:</u>			
5	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	45	
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93%:</u>			
6	Backfilling to trenches, holes, etc.	m3	7	
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	Section 4			
	Bill No. 3			
	Rainwater tank and stand			

<u>G5 Earth filling supplied by the Contractor compacted to 95% MOD AASHTO:</u>					
7	Under floors, steps, pavings, etc.	m3	4		
<u>Compaction of surfaces</u>					
8	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m2	13		
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>					
9	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m2	16		
10	To bottoms and sides of trenches, holes, etc.	m2	18		
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>					
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>					
<u>25Mpa/19mm Concrete</u>					
11	Strip footings.	m3	6		
<u>REINFORCED CONCRETE</u>					
<u>25MPa/19mm Concrete:</u>					
12	Tank concrete slab.	m3	2		
<u>MOVEMENT JOINTS</u>					
<u>Malthoid 3 ply or equal approved waterproofing membrane in slip joints between horizontal concrete and brick surfaces including cement mortar bed</u>					
13	Not exceeding 300mm wide.	m	32		
<u>FINISHING TOP SURFACE OF CONCRETE</u>					
Carried to Collection					
Section 4					
Bill No. 3					
Rainwater tank and stand					
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Section 4

Bill No. 3

Rainwater tank and stand

COLLECTION

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Bill No. 3

Rainwater tank and stand

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Section 4

SECTION SUMMARY - EXTERNAL WORKS (PROVISIONAL)

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Platforms

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Stormwater reticulation

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Rainwater tank and stand

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Section 4

Item No		Quantity	Rate	Amount
	<u>SECTION 5</u>			
	<u>BILL No. 1</u>			
	<u>PROVISIONAL SUMS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Tenderers are advised that no claim in respect of loss of profit or Preliminary charges based on the omission of these amounts will be considered and the said amounts will be omitted strictly without any financial compensation payable to the Contractor.			
	Provisional sums and Budgetary allowances contained herein may be omitted or reduced at the Employer's discretion and the Contractor shall not be entitled to claim for any loss by way of reductions or omission of any discount, or percentage relating to Provisional amounts and Budgetary sums or any loss of profit related thereto.			
	<u>ELECTRICAL INSTALLATION</u>			
1	Provide the sum of R198 000.00 for Electrical Installation	Item		198 000.00
2	Add: Mark-up		%	
	<u>BUDGETARY ALLOWANCES</u>			
	<u>The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent:</u>			
3	Provide the sum of R32 500.00 for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R6 500.00 a month for the full contract duration.	Item		32 500.00
4	Add: Mark-up		%	
	Carried to Final Summary		R	
	Section 5			
	Bill No. 1			
	Provisional Sums			

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES	4	
2	TEMPORARY WORKS (PROVISIONAL)	5	
3	BUILDING WORKS	55	
4	EXTERNAL WORKS (PROVISIONAL)	68	
5	PROVISIONAL SUMS	69	
	SUB-TOTAL		R
	<u>CONTINGENCIES</u>		
	Allow ten per cent (10%) of the above sub-total for contingencies to be used as directed and deducted in whole or in part if not required.		R
	SUB-TOTAL		R
	Add Value Added Tax at the rate of 15%		R
	Carried to Form of Offer and Acceptance		R