

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

**Item  
No**

**Qty**

**Rate**

**Amount**

**BILL NO. 1 PRELIMINARIES**

**PREAMBLES FOR TRADES**

The General Preambles for Trades 2017 as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from the brevity of description of items fully described in the said General Preambles will be entertained

Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles

The contractor's price for all items throughout these bills of quantities must take into account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications

**Standard of Materials**

All materials must comply with the requirements of the NHBRC (National Home Builders Registration Council).

In the absence of detailed specifications for any item or items, the National Building Regulations, the latest applicable South African Bureau of Standards Specification, or where such does not exist, then the latest applicable British Standard Specification shall apply.

**Carried to Collection**

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**PHASE 2B**

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Item No		Qty	Rate	Amount
	<p><b><u>PRELIMINARIES</u></b></p> <p>Where explanations or comments are reflected in these Preliminaries, same are to be read as supplementing as opposed to varying the provisions of the relevant clauses</p> <p><b><u>SECTION A: PRINCIPAL BUILDING AGREEMENT - JBCC Series</u></b></p> <p><b>NOTES</b></p> <p>The JBCC Principal Building Agreement (Edition 6.2 - July 2018) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these bills of quantities</p> <p>Contractor's are referred to the abovementioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p>			
	<b>Carried to Collection</b>		R	
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Item No		Qty	Rate	Amount
<b><u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u></b>				
<b><u>Interpretation (A1-A7)</u></b>				
1	Clause 1.0 - Definitions and interpretation	Item		
2	Clause 2.0 - Law, regulations and notices	Item		
3	Clause 3.0 - Offer and acceptance	Item		
4	Clause 4.0 - Cession and assignment	Item		
5	Clause 5.0 - Documents	Item		
6	Clause 6.0 - Employer's agents	Item		
7	Clause 7.0 - Design responsibility	Item		
<b><u>Insurance and security (A8-A11)</u></b>				
8	Clause 8.0 - Works risk	Item		
9	Clause 9.0 - Indemnities	Item		
10	Clause 10.0 - Insurances	Item		
11	Clause 11.0 - Securities	Item		
<b><u>Execution (A12 - A17)</u></b>				
12	Clause 12.0 - Obligations of the parties	Item		
13	Clause 13.0 - Setting out	Item		
14	Clause 14.0 - Nominated subcontractors	Item		
15	Clause 15.0 - Selected subcontractors	Item		
16	Clause 16.0 - Direct contractors			
	Attendance on direct contractors	Item		
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Item No		Qty	Rate	Amount
17	Clause 17.0 - Contract instructions	Item		
	<b><u>Completion (A18 - A24)</u></b>			
18	Clause 18.0 - Interim completion	Item		
19	Clause 19.0 - Practical completion	Item		
20	Clause 20.0 - Completion in sections	Item		
21	Clause 21.0 - Defects liability period and final completion	Item		
22	Clause 22.0 - Latent defects liability period	Item		
23	Clause 23.0 - Revision of date for practical completion	Item		
24	Clause 24.0 - Penalty for late or non-completion	Item		
	<b><u>Payment (A25 - A27)</u></b>			
25	Clause 25.0 - Payment	Item		
26	Clause 26.0 - Adjustment of the contract value and final account	Item		
27	Clause 27.0 - Recovery of expense and/or loss	Item		
	<b><u>Suspension and termination (A28 - A29)</u></b>			
28	Clause 28.0 - Suspension by the contractor	Item		
29	Clause 29.0 - Termination by employer	Item		
	<b><u>Dispute resolution (A30)</u></b>			
30	Clause 30.0 - Dispute resolution	Item		
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Item No		Qty	Rate	Amount
	<b><u>SECTION B: PRELIMINARIES</u></b>			
	<b><u>Interpretation (B1)</u></b>			
31	Clause 1.1 - Definitions	Item		
32	Clause 1.2 - Interpretation	Item		
	<b><u>Documents (B2)</u></b>			
33	Clause 2.1 - Checking of documents	Item		
34	Clause 2.2 - Provisional bills of quantities	Item		
35	Clause 2.3 - Availability of construction information	Item		
36	Clause 2.4 - Ordering of materials and goods	Item		
	<b><u>Previous work and adjoining properties (B3)</u></b>			
37	Clause 3.1 - Previous work - dimensional accuracy	Item		
38	Clause 3.2 - Previous work - defects	Item		
39	Clause 3.3 - Inspection of adjoining properties	Item		
	<b><u>The site (B4)</u></b>			
40	Clause 4.1 - Handover of site in stages	Item		
41	Clause 4.2 - Enclosure of the works	Item		
42	Clause 4.3 - Geotechnical and other investigations	Item		
43	Clause 4.4 - Encroachments	Item		
44	Clause 4.5 - Existing premises occupied	Item		
45	Clause 4.6 - Services - known	Item		
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Item No		Qty	Rate	Amount
	<b><u>Management of contract (B5)</u></b>			
46	Clause 5.1 - Management of the works	Item		
47	Clause 5.2 - Progress meetings	Item		
48	Clause 5.3 - Technical meetings	Item		
	<b><u>Samples, shop drawings and manufacturer's instructions (B6)</u></b>			
49	Clause 6.1 - Samples of materials	Item		
50	Clause 6.2 - Workmanship samples	Item		
51	Clause 6.3 - Shop drawings	Item		
52	Clause 6.4 - Compliance with manufacturer's instructions	Item		
	<b><u>Deposits and fees (B7)</u></b>			
53	Clause 7.1 - Deposits and fees	Item		
	<b><u>Temporary services (B8)</u></b>			
54	Clause 8.1 - Water	Item		
55	Clause 8.2 - Electricity	Item		
56	Clause 8.3 - Ablution and welfare facilities	Item		
57	Clause 8.4 - Communication facilities	Item		
	<b><u>Prime cost amounts (B9)</u></b>			
58	Clause 9.1 - Responsibility for prime cost amounts	Item		
	<b><u>Attendance on subcontractors (B10)</u></b>			
59	Clause 10.1 - General attendance	Item		
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<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
60	Clause 10.2 - Special attendance	Item		
	<b><u>General (B11)</u></b>			
61	Clause 11.1 - Protection of the works	Item		
62	Clause 11.2 - Protection/isolation of existing works and works occupied in sections	Item		
63	Clause 11.3 - Security of the works	Item		
64	Clause 11.4 - Notice before covering work	Item		
65	Clause 11.5 - Disturbance	Item		
66	Clause 11.6 - Environmental disturbance	Item		
67	Clause 11.7 - Works cleaning and clearing	Item		
68	Clause 11.8 - Vermin	Item		
69	Clause 11.9 - Overhand work	Item		
70	Clause 11.10 - Tenant installations by direct contractors	Item		
71	Clause 11.11 - Advertising	Item		
	<b><u>SECTION C: SPECIFIC PRELIMINARIES</u></b>			
72	Standard Conditions of Tender	Item		
73	Additional Conditions of Tender	Item		
74	Standard Conditions of Contract	Item		
75	Contract Data Schedule	Item		
76	Additional Conditions of Contract	Item		
	<b>Carried to Collection</b>		R	
	<b>PHASE 2B</b>			

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Preliminaries

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**PHASE 2B**

**CONTRACT NO.1H-32115  
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Item No		Qty	Amount
	<p><b><u>SECTION NO. 1 - PHASE 2B-1</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES</u></b></p>		
1	<p>Allow for all preliminary costs associated with complying with the JBCC Series (Edition 6.2) May 2018 Principal Building Agreement for <b>Phase 2B-1</b>. Refer to <b>Preliminaries</b> Bill of Quantities for detailed clauses for pricing purposes.</p> <p>F:..... V:..... T:.....</p>	Item	
2	<p><b><u>PENALTY FOR LATE COMPLETION :</u></b></p> <p>Contract Period : <i>14 months (Including Builders Break)</i></p> <p>Penalty amount per Calendar day : <i>R 8 900.00</i></p>	Item	
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 1</b></p>	R	
	<p>SECTION NO.1 - PHASE 2B-1            Bill No. 1            Preliminaries  <b>PHASE 2B</b></p>		

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Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>EARTHWORKS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Nature of ground</u></b></p> <p>The Tenderer must acquaint himself with the nature of the material to be excavated. Excavation in 'earth' shall be defined as excavation in all types of material.</p> <p><b><u>Subterranean water</u></b></p> <p>No information regarding subterranean water is available. The Tenderer must acquaint himself of the presence and depth of subterranean water and allow for same in his pricing</p> <p><b><u>Carting away of excavated material</u></b></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><b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p>			
1	To remove sloping banks	m3	256	
2	Trenches	m3	1 257	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 2 Earthworks <b>PHASE 2B</b>			

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<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>			
3	Soft rock	m3	104	
4	Hard rock	m3	46	
	<b><u>Extra over all excavations for carting away</u></b>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	1 515	
	<b><u>Risk of collapse of excavations</u></b>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	8 683	
	<b><u>Keeping excavations free of water</u></b>			
7	Keeping excavations free of water other than subterranean water		Item	
	<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u></b>			
8	Backfilling to trenches, holes, etc	m3	134	
	<b><u>Earth filling of G5 material in accordance with SABS 1200 DM supplied by the contractor compacted to 95% Mod AASHTO density</u></b>			
9	Backfilling to trenches, holes, etc	m3	149	
	<b><u>Compaction of surfaces</u></b>			
10	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 93% Mod AASHTO density	m2	4 708	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 2 Earthworks <b>PHASE 2B</b>			

Item No	<u>Prescribed density tests on filling</u>	No	Qty	Rate	Amount
11	"Modified AASHTO Density" test		253		
<b><u>SOIL POISONING</u></b>					
<b><u>Soil insecticide</u></b>					
12	Under floors, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	4 708		
13	Ditto but to bottom and sides of ground beam	m2	9 667		
<b>Carried to Collection</b>					R
SECTION NO.1 - PHASE 2B-1 Bill No. 2 Earthworks <b>PHASE 2B</b>					

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SECTION NO.1 - PHASE 2B-1

Bill No. 2

Earthworks

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SECTION NO.1 - PHASE 2B-1

Bill No. 2

Earthworks

**PHASE 2B**

**CONTRACT NO.1H-32115  
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Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p>Formwork to sides of 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"</p>			
1	<p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p> <p>Surface blinding under footings and bases m3</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.1 - PHASE 2B-1            Bill No. 3            Concrete, Formwork &amp; Reinforcement  <b>PHASE 2B</b></p>	101		<p style="text-align: right;">R</p>

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<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
	<b><u>30MPa / 19mm concrete</u></b>			
2	Strip footings	m3	68	
3	Foundation beams to raft slab	m3	999	
4	Raft slab	m3	832	
5	Stairs including landings, beams and inverted beams	m3	220	
	<b><u>TEST BLOCKS</u></b>			
6	Making and testing 150 x 150 x 150mm concrete strength test cube	No	3 016	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a power float finish</u></b>			
7	Raft slabs, etc	m2	6 403	
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
	<b><u>Rough formwork to sides</u></b>			
8	Strip footings not exceeding 300mm high	m	438	
9	Ground beams	m2	1 265	
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	7 605	
11	Sloping and stepped outer edges of stairs 330mm high extreme	m	670	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 3 Concrete, Formwork & Reinforcement <b>PHASE 2B</b>			

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Item No		Qty	Rate	Amount
	<b><u>Rough formwork to soffits</u></b>			
12	Stairs with sloping soffits	m2	832	
	<b><u>MOVEMENT JOINTS, ETC</u></b>			
	<b><u>Two layers 375 micron plastic slip joints between horizontal concrete and brick surfaces including cement mortar bed</u></b>			
13	Not exceeding 300mm wide	m	5 604	
	<b><u>Expansion joints with bitumen impregnated softboard between vertical concrete and block surfaces</u></b>			
14	15mm Joints not exceeding 300mm high	m	944	
	<b><u>Saw cut joints</u></b>			
15	3 x 30mm Saw cut joints in top of concrete	m	559	
	<b><u>REINFORCEMENT</u></b>			
	<b><u>Mild steel reinforcement to structural concrete work</u></b>			
16	Bars of various diameters	t	32.89	
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>			
17	Bars of various diameters	t	256.54	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 3 Concrete, Formwork & Reinforcement <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
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Item No	Qty	Rate	Amount
<p><b><u>DESIGN, SUPPLY &amp; INSTALL THE FOLLOWING</u></b></p> <p>Tenderers are advised that only prefabricated beam and block slab systems will be considered for the first floor slab construction.</p> <p>The Tenderer shall ensure that all shop drawings are submitted with their tender for approval by the Principal Agent.</p> <p><i>Contractor to indicate here the name of the supplier of the beam and block slab proposed :</i></p> <p>.....</p> <p>The design, manufacture, supply and installation of the following items shall be under the control of a registered Engineer in accordance with relevant SANS standards. The tenderer shall be required to lodge a written guarantee/certificate for the designed component of each unit from a qualified registered Structural Engineer with the required capability certificate and professional indemnity cover.</p> <p>The design shall comply with all relevant SANS standards as well as the National Home Building Registration Council Manual (NHBRC Manual). These include but are not restricted to :</p> <ul style="list-style-type: none"> <li>a) Design of Concrete Elements - SANS 0100:2000 Ed2.2</li> <li>b) Loading Code - SANS 10160:2011</li> <li>c) Construction Methods (National Building Regulations) - SANS 10400</li> </ul> <p>Tenderers are to refer to drawings annexured to this document.</p> <p>-----</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.1 - PHASE 2B-1            Bill No. 3            Concrete, Formwork &amp; Reinforcement  <b>PHASE 2B</b></p>			
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**CONTRACT NO.1H-32115  
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Item No	<u>FIRST FLOOR SLAB</u>	Qty	Rate	Amount
	<p><u>Design, supply and install prefabricated beam and block first floor slab complete with pre-stressed reinforced concrete beams, approved blocks laid end to end in rows, concrete topping, mesh and bar reinforcement, temporary propping, expansion joints, powerfloated finish to top and 5mm thick cement bagging finish to soffit, designed for a Imposed Load of not less than 2kN/m2 (As per SANS 10160 Table 1). Slab thickness not to exceed 200mm overall</u></p>			
18	<p>First floor slab on 7MPa loadbearing blockwork size 6250 x 4070mm overall on plan and 2,4m above bearing level including 1025 x 2900mm opening for staircase with beams/lintols spanning a length of 6250mm (Unit Type A) (Blockwork and staircase elsewhere measured)</p>	No	220	
19	<p>First floor slab on 7MPa loadbearing blockwork size 6140 x 4272mm overall on plan and 2,4m above bearing level including L-shaped opening for staircase 4150mm girth x 900mm wide, with beams/lintols spanning a length of 6140mm (Unit Type B) (Blockwork and staircase elsewhere measured)</p>	No	30	
<b>Carried to Collection</b>				R
<p>SECTION NO.1 - PHASE 2B-1 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>				

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SECTION NO.1 - PHASE 2B-1

Bill No. 3

Concrete, Formwork & Reinforcement

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SECTION NO.1 - PHASE 2B-1

Bill No. 3

Concrete, Formwork & Reinforcement

**PHASE 2B**

**CONTRACT NO.1H-32115  
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Item No	Qty	Rate	Amount
<p><b><u>BILL NO. 4</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>BLOCKWORK</u></b></p> <p><b><u>Blockwork</u></b></p> <p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction".</p> <p>Blocks shall comply with SANS 1215 and shall bear the SANS mark.</p> <p>All blocks must be saw cut and not broken with a trowel and prices must include for this.</p> <p>All M150 blocks are to have a minimum compressive strength of 7 MPa.</p> <p>Descriptions of blockwork shall be deemed to include for wedging and pinning against columns, beams, slabs, etc.</p> <p>Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Surfaces to receive bagging shall have flush joints.</p>			
<p><b>Carried to Collection</b></p>			R
<p>SECTION NO.1 - PHASE 2B-1            Bill No. 4            Masonry  <b>PHASE 2B</b></p>			

Item No		Qty	Rate	Amount
	<b><u>SAMPLES</u></b>			
	Samples of all masonry building units, except those for walls described as "load 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 to site.			
	<b><u>FOUNDATIONS</u></b>			
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in class I cement mortar</u></b>			
1	140mm Walls in M150 blocks	m2	531	
	<b><u>SUPERSTRUCTURE</u></b>			
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 3,5MPa concrete masonry blocks in Class II cement mortar</u></b>			
2	90mm Walls in M100 blocks	m2	6 029	
3	90mm Shower kerb one course high in M100 blocks	m	261	
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in Class I cement mortar</u></b>			
4	140mm Walls in M150 blocks	m2	21 467	
5	140mm Walls in M150 blocks in beamfilling	m2	433	
6	140mm Walls in M150 blocks above wall plate level	m2	1 672	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1			
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	Masonry			
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Item No		Qty	Rate	Amount
	<b><u>BLOCKWORK SUNDRIES</u></b>			
	<b><u>10MPa/19mm Mass concrete filling to cavity of blockwork</u></b>			
7	Mass concrete filling	m3	33	
	<b><u>Galvanised blockwork reinforcement</u></b>			
8	75mm Wide reinforcement built in horizontally	m	79 366	
	<b><u>"Fabcon" or equal approved pre-stressed fabricated lintels</u></b>			
9	90 x 110mm Lintels in lengths not exceeding 3m	m	987	
10	140 x 110mm Lintels in lengths not exceeding 3m	m	3 041	
	<b><u>Galvanised hoop iron cramps, ties, etc</u></b>			
11	30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into blockwork	No	3 744	
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	SECTION NO.1 - PHASE 2B-1 Bill No. 4 Masonry <b>PHASE 2B</b>			

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 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 4

Masonry

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SECTION NO.1 - PHASE 2B-1

Bill No. 4

Masonry

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<p><b><u>BILL NO. 5</u></b></p> <p><b><u>WATERPROOFING</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>				
<p><b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b></p>				
<p><b><u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or equal approved embossed damp proof course</u></b></p>				
1	In walls	m2	898	
2	In walls under window cills	m2	250	
<p><b><u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or equal approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></b></p>				
3	Under raft slabs	m2	4 880	
4	Sides of ground beams	m2	7 279	
<p><b><u>PROTECTION TO WATERPROOFING</u></b></p>				
<p><b><u>10mm Softboard protection</u></b></p>				
5	Vertically behind ground beams	m2	731	
<p><b>Carried to Collection</b></p>				R
<p>SECTION NO.1 - PHASE 2B-1 Bill No. 5 Waterproofing <b>PHASE 2B</b></p>				

Item No	<b><u>JOINT SEALANTS, ETC</u></b>	Qty	Rate	Amount
6	<b><u>"Sikaflex-11FC" or equal approved silicone sealing compound</u></b> Pointing joint between window frames and blockwork	m	7 170	
7	<b><u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u></b> 15 x 10mm In expansion joints in walls including raking out expansion joint filler as necessary	m	557	
<b>Carried to Collection</b>				R
SECTION NO.1 - PHASE 2B-1 Bill No. 5 Waterproofing <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 5

Waterproofing

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SECTION NO.1 - PHASE 2B-1

Bill No. 5

Waterproofing

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b>BILL NO. 6</b></p> <p><b><u>ROOF COVERINGS, ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>			
	<p><b><u>TILES</u></b></p> <p><b><u>420 x 332mm "Marley" or equal approved Double Roman through colour (Slate Grey) concrete roof tiles fixed with suitable non-corrosive storm clips as required nailed through underlay to and including 38 x 38mm sawn softwood battens at 320mm centres</u></b></p>			
1	Roof covering with pitch not exceeding 25 degrees	m2	8 936	
2	Ridge tiles to match roofing tiles including soaker underlay, additional battens, etc and bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	1 169	
3	Verge capping tiles to match roofing tiles including soaker underlay, additional battens, etc bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	1 933	
4	Ridge end tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour	No	235	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 6 Roof Coverings <b>PHASE 2B</b>			

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 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
5	<p><b><u>"Monier Easyflash" or equal approved 1,4mm thick aluminium composite waterproofing membrane with butyl self adhesive fixed in strict accordance to the manufacturer's instructions</u></b></p> <p>Stepped side wall flashing</p>	m	519	
<b><u>UNDERTILE MEMBRANE</u></b>				
6	<p><b><u>"Marley Econo" or equal approved residential application undertile membrane fixed in strict accordance with the manufacturer's instructions</u></b></p> <p>Undertile membrane laid taut over rafters (at approximately 690mm centres) and fixed concurrent with tilting battens, purlins, etc</p>	m2	6 942	
<b>Carried to Collection</b>				R
<p>SECTION NO.1 - PHASE 2B-1          Bill No. 6          Roof Coverings  <b>PHASE 2B</b></p>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 6

Roof Coverings

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SECTION NO.1 - PHASE 2B-1

Bill No. 6

Roof Coverings

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>BILL NO. 7</u></b></p>			
<p><b><u>CARPENTRY AND JOINERY</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>			
<p><b><u>Fixing</u></b></p>			
<p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p><b><u>ROOFS, ETC</u></b></p>			
<p>The design, manufacture and transportation of the roof trusses, bracing, etc shall be under the control of a registered Engineer in accordance with SANS 1900, SANS 10166 and SANS 100163. It shall be required from the manufacturer of the trusses to lodge a written guarantee that his construction has been designed by a qualified Structural Engineer and that he is in possession of a capability certificate issued by the Institute for Timber Construction and approved by the Engineer.</p>			
<p>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.</p>			
<p><b>Carried to Collection</b></p>			
<p>SECTION NO.1 - PHASE 2B-1 Bill No. 7 Carpentry &amp; Joinery <b>PHASE 2B</b></p>			
		R	

Item No	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 and permanent bracing	Qty	Rate	Amount
	<p><b><u>Prefabricated plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 690mm centres. Roof Covering is concrete roof tiles on timber battens. Ceilings are 6,4mm plasterboard ceilings. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences.</p> <p><b><u>Sawn softwood trusses</u></b></p>			
1	Double pitched roof truss 3992mm span x 850mm high with 740mm eaves overhang projection both sides	No	61	
2	Double pitched roof truss 4132mm span x 850mm high with 600mm eaves overhang projection one side and 740mm other side	No	121	
3	Double pitched roof truss 4272mm span x 850mm high with 600mm eaves overhang projection both sides	No	121	
4	Double pitched roof truss 6036mm span x 1200mm high with 740mm eaves overhang projection both sides	No	438	
5	Double pitched roof truss 6316mm span x 1200mm high with 600mm eaves overhang projection both sides	No	1 098	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 7 Carpentry & Joinery <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
6	Double pitched roof truss 6884mm span x 1350mm high with 740mm eaves overhang projection both sides	No	18		
7	Double pitched roof truss 7024mm span x 1350mm high with 600mm eaves projection one side and 740mm other side	No	3		
8	Double pitched roof truss 7164mm span x 1350mm high with 600mm eaves overhang projection both sides	No	13		
<b><u>Sawn softwood</u></b>					
9	38 x 76mm Wall plates	m	2 130		
<b><u>Sundries</u></b>					
10	Two coats creosote on sawn timbers	m2	719		
<b><u>EAVES, VERGES ETC</u></b>					
<b><u>Fibre-cement fascia and barge boards</u></b>					
11	10mm x 225mm Fibre cement fascia board fixed to truss and joined with PVC joiner	m	2 199		
12	8mm x 200 x 80mm Barge board with PVC joiners fixed to brandering	m	1 968		
<b><u>DOORS, ETC</u></b>					
<b><u>Hollow core flush doors with commercial veneer on both sides suitable for painting hung to steel frames</u></b>					
13	40mm Door, 813 x 2032mm high	No	759		
<b><u>Wrot meranti doors hung to steel frames</u></b>					
14	44mm Framed, ledged and braced batten door 813 x 2032mm high filled in with 22mm V-jointed boarding both sides	No	503		
<b>Carried to Collection</b>					
SECTION NO.1 - PHASE 2B-1					
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Carpentry & Joinery					
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**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>SUPPORT FOR WATER STORAGE TANK</u></b>			
	<b><u>S.A Pine</u></b>			
15	38 x 114mm Bearers bolted	m	759	
	<b><u>Shutterboard</u></b>			
16	18mm Thick boarding	m2	253	
	<b>Carried to Collection</b>			
				R
SECTION NO.1 - PHASE 2B-1 Bill No. 7 Carpentry & Joinery <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 7

Carpentry & Joinery

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SECTION NO.1 - PHASE 2B-1

Bill No. 7

Carpentry & Joinery

**PHASE 2B**

Item No		Unit	Qty	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>CEILINGS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 elsewhere</p>				
	<p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>6,4mm Gypsum plasterboard with taped and skimmed joints</u></b></p>				
1	Ceilings including 38 x 38mm SA Pine brandering at 400mm centres	m2	5 586		
2	Extra over ceiling and brandering for 650 x 650mm trap door of 38 x 38mm wrot softwood rebated framing with 38 x 114mm sawn softwood trimmers covered with ceiling board and fitted flush in opening with 19 x 50mm wrot softwood fillet all round	No	253		
	<p><b><u>Gypsum plasterboard cornices</u></b></p>				
3	50 x 50mm cornice fixed to ceiling/wall with cornice adhesive	m	9 174		
	<b>Carried to Collection</b>				R
	<p>SECTION NO.1 - PHASE 2B-1                  Bill No. 8                  Ceilings  <b>PHASE 2B</b></p>				



**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 8

Ceilings

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SECTION NO.1 - PHASE 2B-1

Bill No. 8

Ceilings

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Finishes to ironmongery</u></b></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p>			
	<p><b><u>LOCKS</u></b></p> <p><b><u>"Union" or equal approved</u></b></p>			
1	Two lever mortice lockset with CB furniture	No	749	
2	Three lever mortice lockset with CB furniture	No	503	
	<p><b><u>BATHROOM FITTINGS</u></b></p>			
3	Chromium plated toilet roll holder	No	253	
	<b>Carried to Collection</b>			R
	<p>SECTION NO.1 - PHASE 2B-1 Bill No. 9 Ironmongery <b>PHASE 2B</b></p>			

Item No		Qty	Rate	Amount
<b><u>"Chairman Industries" or equal approved</u></b>				
4	"Railman" (Code DL2) Stainless steel side wall grab rail with dogleg shape 32mm diameter x 900mm long fixed to wall as per engineers specifications	No	3	
5	"Railman" (Code SR2) Stainless steel side wall straight grab rail 32mm diameter x 750mm long fixed to wall as per engineers specifications	No	3	
6	"Railman" (Code XC) Stainless steel shower corner rail 32mm diameter x 650 x 650 x 90mm overall length fixed to wall as per engineers specifications	No	3	
7	"Railman" (Code XS) Stainless steel fold up shower seat 460 x 480mm long fixed to wall as per engineers specifications	No	3	
<b><u>SUNDRIES</u></b>				
8	Rubber door stop plugged	No	1 262	
<b>Carried to Collection</b>				R
SECTION NO.1 - PHASE 2B-1 Bill No. 9 Ironmongery <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
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SECTION NO.1 - PHASE 2B-1

Bill No. 9

Ironmongery

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SECTION NO.1 - PHASE 2B-1

Bill No. 9

Ironmongery

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Descriptions</u></b></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 of concrete</p> <p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Glazing to aluminum window to be 4mm float glass and obscure glass to W3 top hung sash</p>			
	<p><b><u>GALVANIZED STEEL BALUSTRADES, ETC</u></b></p> <p><b><u>Welded balustrading to staircase</u></b></p>			
1	<p>Raking balustrading 1264mm high formed of 40 x 40mm square hollow section continuous top and bottom rails filled in with 30 x 30mm square hollow section horizontal rails at 100mm centres and 40 x 40mm square hollow section stanchions at average 1m centres bolted to side of concrete stairs with 2 No. M16 anchor bolts at 500mm centres</p>	m	719	
	<b>Carried to Collection</b>			R
	<p>SECTION NO.1 - PHASE 2B-1 Bill No. 10 Metalwork <b>PHASE 2B</b></p>			

Item No			Qty	Rate	Amount
<b><u>GALVANIZED PRESSED STEEL DOOR FRAMES</u></b>					
<b><u>"Durowin" or equal approved 1mm thick single rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 90mm block walls</u></b>					
2	Frame for door 813 x 2032mm high	No	759		
<b><u>"Durowin" or equal approved 1,2mm thick double rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 140mm block walls</u></b>					
3	Frame for door 813 x 2032mm high	No	503		
<b><u>GALVANIZED STEEL WINDOWS, DOORS, ETC</u></b>					
<b><u>"Durowin" Standard residential windows</u></b>					
4	Window Type NE1 (Code W3), 533 x 654mm high	No	223		
5	Window Type NC1 (Code W4), 533 x 949mm high	No	30		
6	Window Type NC7 (Code W2), 1022 x 949mm high	No	1 227		
7	Window Type ND7 (Code W1), 1022 x 1245mm high	No	283		
8	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 654mm	No	1		Rate only
9	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 949mm	No	1		Rate only
10	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 949mm	No	1		Rate only
11	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 1245mm	No	1		Rate only
<b>Carried to Collection</b>				R	
SECTION NO.1 - PHASE 2B-1 Bill No. 10 Metalwork <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 10

Metalwork

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SECTION NO.1 - PHASE 2B-1

Bill No. 10

Metalwork

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<b><u>Untinted granolithic on concrete</u></b>			
1	25mm Thick on treads and risers of stairs including reedings	m2	1 311	
	<b><u>Untinted granolithic screed with "Sikalite" or equal approved waterproofing admixture on concrete applied in strict accordance with the manufacturers instructions</u></b>			
2	Average 60mm thick on shower floors to falls	m2	205	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster on blockwork and small part on concrete</u></b>			
3	On walls	m2	31 531	
4	On narrow widths	m2	1 500	
	<b><u>Cement plaster with "Sikalite" or equal approved waterproofing admixture on blockwork applied in strict accordance with the manufacturers instructions</u></b>			
5	On walls	m2	4 347	
6	On narrow widths	m2	137	
	<b><u>Cement plaster on concrete</u></b>			
7	On raking soffits of stairs	m2	832	
8	On narrow widths	m2	172	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 11 Plastering <b>PHASE 2B</b>			



**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 11

Plastering

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SECTION NO.1 - PHASE 2B-1

Bill No. 11

Plastering

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING AND DRAINAGE</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>High density polyethylene pipes :</u></b></p> <p>Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips at maximum 500mm centres, with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><b><u>uPVC pipes and fittings:</u></b></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><b><u>uPVC pressure pipes and fittings:</u></b></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing &amp; Drainage <b>PHASE 2B</b></p>			
			R	

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>Fixing of pipes</u></b></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><b><u>Reducing fittings</u></b></p> <p>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</p> <p><b><u>Laying, backfilling, bedding, etc. of pipes</u></b></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following:            SANS 1200 L : Medium-pressure pipelines            LD : Sewers            LE : Stormwater drainage            Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200            DB : Earthworks (Pipe trenches)            Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200            LB : Bedding (Pipes).            Unless otherwise described bedding of rigid pipes shall be class B bedding</p>			
<p><b>Carried to Collection</b></p>			R
<p>SECTION NO.1 - PHASE 2B-1            Bill No. 12            Plumbing &amp; Drainage  <b>PHASE 2B</b></p>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>Flush pans</u></b></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><b><u>Stainless steel sinks</u></b></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><b><u>Waste unions</u></b></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><b><u>Sealing around sanitary fittings, etc</u></b></p> <p>Joints around sanitary fittings at junction with walls, etc are to be sealed with an approved silicone sealant and prices shall include for this</p>			
	<p><b><u>STORMWATER DRAINAGE</u></b></p> <p><b><u>Normal duty uPVC pipes</u></b></p>			
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	3 036	
	<p><b><u>Extra over normal duty uPVC pipes for fittings</u></b></p>			
2	110mm Bend	No	506	
3	110mm Access Junction	No	256	
	<b>Carried to Collection</b>			
	SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Precast Concrete Gulleys</u></b>			
4	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	506	
	<b><u>SOIL DRAINAGE</u></b>			
	<b><u>Normal duty uPVC pipes</u></b>			
5	110mm Pipes laid in and including trenches not exceeding 1m deep	m	3 605	
	<b><u>Extra over normal duty uPVC pipes for fittings</u></b>			
6	110mm Bend	No	1 273	
7	110mm Junction	No	256	
8	110mm Access Junction	No	256	
9	110mm Access reducing junction	No	250	
10	110mm Diameter rodding eye consisting of plain bend at bottom jointed to drain pipe, vertical piping not exceeding 1000mm long including all necessary slow bends, cast iron 'ABC' cover and frame, 150mm thick mass concrete 15MPa/19mm surround all round and including all necessary additional excavation, etc	No	253	
	<b><u>Precast Concrete Gulleys</u></b>			
11	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	473	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>Connection</u></b>			
12	Locating and cutting into side of existing 160mm pipe for and connecting 110mm pipe including inserting 110mm junction	No	253	
	<b><u>Sundries to drainage</u></b>			
13	25mm Diameter hole through 140mm blockwall	No	506	
	<b><u>PLUMBING</u></b>			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>"Marley Vynadeep" or equal approved uPVC</u></b>			
14	125mm Half round eaves gutters with beaded front edge	m	2 199	
15	Extra over eaves gutter for stopped end	No	1 012	
16	Extra over eaves gutter for outlet for 75mm diameter pipe	No	506	
	<b><u>uPVC pipes</u></b>			
17	75mm rainwater pipes	m	2 841	
18	Extra over 75mm rainwater pipe for bend	No	1 012	
19	Extra over 75mm rainwater pipe for shoe	No	506	
	<b><u>SANITARY FITTINGS</u></b>			
	<b><u>Stainless steel sinks</u></b>			
20	Single end bowl sink size 900 x 535mm with chromium plated grating, waste, plug with stirrup, chain and stay, fixed to block wall with and including galvanised gallow brackets (taps, trap elsewhere)	No	253	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

Item No		Qty	Rate	Amount
	<b><u>Glazed ceramic fittings</u></b>			
21	White basin, size 560 x 405mm, with 38mm chromium plated waste union, with one tap hole, anti-theft plug with spindle fixed to wall with and including two 10mm bolts (Taps, traps elsewhere)	No	250	
22	White low-level 90 degree outlet WC suite including matching 4,5 litre low flush cistern and heavy duty white plastic double flap seat	No	250	
	<b><u>"Vaal" or equal approved</u></b>			
23	"Protea Paraplegic" 90° outlet pan (code 750246) and matching 9 litre cistern (code 7116LP) complete with lid, fitments, and purpose-made C.P. side-flush lever (left or right). Bottom inlet water supply must be on same side as flush lever including double flap seat & cover (code 411-65533) (traps, taps elsewhere measured)	No	3	
24	Rounded 510 x 405 x 130mm deep "Hibiscus" basin with one semi-punched tapholes, integrated overflow, and chainstay hole through the centre semi-punched taphole fixed to wall using two 10 mm bolts (code 8448Z0) or as per engineers specifications (waste, taps and traps elsewhere measured)	No	3	
	<b><u>TRAPS, ETC</u></b>			
	<b><u>Flexible rubber</u></b>			
25	50mm Deep seal rubber P-trap	No	506	
	<b><u>Brass</u></b>			
26	50mm Rough brass shower P-trap with CP grating	No	253	
	<b>Carried to Collection</b>			R
SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>				

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>TAPS, VALVES, ETC</u></b>				
27	15mm Stopcock	No	506		
28	22mm Stopcock	No	503		
	<b><u>"Cobra Watertech" or equal approved</u></b>				
29	15mm "Cobra 111" Star chromium plated pillartap	No	500		
30	15mm "500 Series (Code 503-21b)" Chromium plated elbow action pillartap	No	6		
31	15mm "Cobra 128" Star chromium plated underwall pattern stoptap	No	253		
32	15mm "Cobra 027" Chromium plated overhead shower arm	No	250		
33	15mm "Cobra 068BJ" Chromium plated shower rose	No	250		
34	15mm "TVSH1202/CH" Chromium plated 1 function hand shower including water saving insert and 1500mm chrome flexible hose with wall bracket brass outlet (Code TVSH1397/CH)	No	3		
	<b><u>SANITARY PLUMBING</u></b>				
	<b><u>Soil, waste &amp; vent uPVC pipes</u></b>				
35	50mm Pipes to walls, columns, soffits, etc	m	1 713		
36	110mm Pipes to walls, columns, soffits, etc	m	481		
	<b><u>Extra over uPVC pipes for fittings</u></b>				
37	50mm Access bend	No	1 012		
38	50mm Junction	No	253		
	<b>Carried to Collection</b>				R
SECTION NO.1 - PHASE 2B-1					
Bill No. 12					
Plumbing & Drainage					
<b>PHASE 2B</b>					

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
39	110mm x 245mm Long "Wirquin Soupless" flexible fitting	No	253		
40	110mm Access bend	No	253		
41	110mm Access junction	No	253		
42	110mm Pan connector	No	253		
43	110 x 50mm Access reducing junction	No	253		
44	50mm "GI One way" vent valve	No	253		
45	110mm "GI Two way" vent valve	No	253		
<b><u>WATER SUPPLIES</u></b>					
<b><u>HDPE Class 12 rigid high density polyethylene pipes with plastic compression fittings</u></b>					
46	16mm Pipes laid in and including trenches not exceeding 1m deep	m	3 036		
47	16mm Pipes to walls, soffits ,etc	m	3 795		
48	25mm Pipes to walls, soffits ,etc	m	3 281		
49	32mm Pipes to walls, soffits ,etc	m	1 265		
<b><u>Extra over rigid high density polyethylene pipes for plastic compression fittings</u></b>					
50	16mm Fittings	No	3 289		
51	25mm Fittings	No	1 768		
52	32mm Elbow	No	506		
53	32 x 25mm Reducing tee	No	253		
<b>Carried to Collection</b>					R
SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Connection</u></b>			
54	Cutting into existing water supply pipe for and including connection with 16mm pipe including all fittings, etc	No	253	
	<b><u>COLLECT FROM STORES AND FIX ONLY THE FOLLOWING</u></b>			
	<b><u>Collect from eThekweni Municipality Store in Springfield Park, Durban</u></b>			
55	100 Litre water storage tank size approximately 800mm wide x 1000mm long placed in position between roof trusses in roof space	No	253	
	<b><u>TESTING</u></b>			
56	Testing the whole of the water supply and sanitary pipe system including fittings	No	253	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 12

Plumbing & Drainage

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SECTION NO.1 - PHASE 2B-1

Bill No. 12

Plumbing & Drainage

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<b><u>4mm Clear float glass</u></b>			
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	1 189	
2	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	377	
	<b><u>4mm Obscure glass</u></b>			
3	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	78	
	<b><u>MIRRORS</u></b>			
	<b><u>4mm Silvered float glass copper backed mirrors with bevelled edges holed for and fixed to blockwork</u></b>			
4	Mirror 500 x 600mm high	No	3	
	<b>Carried Forward to Summary of Section No. 1</b>			
	SECTION NO.1 - PHASE 2B-1 Bill No. 13 Glazing <b>PHASE 2B</b>			
				R

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>SABS Specifications</u></b></p> <p>High gloss enamel paint : SANS 630 Grade I</p> <p>Oil gloss enamel paint : SANS 631</p> <p>Primers for wood for external work : SANS 678 Type I</p> <p>Primers for wood for internal work : SANS 678 Type III</p> <p>Zink chromate primers for steel : SANS 679 Type I</p> <p>Wash primer (metal etch) : SANS 723</p> <p>Varnish for interior use : SANS 887 Type I</p> <p>Emulsion paints : SANS 1586</p>			
	<p><b><u>PAINTWORK, ETC TO NEW WORK</u></b></p> <p><b><u>ON SCREEDED FLOORS</u></b></p> <p><b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b></p>			
1	On granolithic screeded shower floors	m2	205	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON BAGGED BLOCKWORK</u></b>			
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat Stipple Texture PVA emulsion paint</u></b>			
2	On soffit of precast beam and block slab	m2	5 700	
	<b><u>ON FLOATED PLASTER</u></b>			
	<b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b>			
3	On internal shower walls	m2	1 647	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat PVA emulsion paint</u></b>			
4	On internal walls	m2	37 391	
5	On external walls	m2	19 792	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
6	On ceilings and beams	m2	1 002	
	<b><u>ON PLASTER BOARD</u></b>			
	<b><u>One coat primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
7	On ceilings and cornices	m2	5 586	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1			
	Bill No. 14			
	Paintwork			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON FIBRE-CEMENT</u></b>			
	<b><u>One coat primer, one undercoat and two coats pure acrylic emulsion paint</u></b>			
8	On fascias and barge boards	m2	1 573	
	<b><u>ON METAL</u></b>			
	<b><u>One coat calcium plumbate primer</u></b>			
9	On backs of frames not exceeding 300mm girth	m	6 434	
	<b><u>One coat galvanised iron cleaning primer, one coat calcium plumbate primer, one undercoat and one finishing coat polyurethane velvet enamel paint on galvanised steel</u></b>			
10	On door frames	m2	1 827	
11	On windows	m2	3 289	
12	On balustrades (both sides measured over the full flat area)	m2	1 844	
	<b><u>ON WOOD</u></b>			
	<b><u>One coat wood primer, one undercoat and one finishing coat polyurethane velvet enamel paint</u></b>			
13	On doors	m2	2 646	
	<b><u>Two coats exterior quality clear polyurethane varnish</u></b>			
14	On doors	m2	1 948	
	<b>Carried to Collection</b>			R
	SECTION NO.1 - PHASE 2B-1 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>HOUSE NUMBERING</u></b></p> <p><b><u>150mm High by 100mm wide black lettering painted using approved stencils - priced per set of 4 digits per unit</u></b></p>			
15	On painted walls	No	253	
	<p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.1 - PHASE 2B-1            Bill No. 14            Paintwork  <b>PHASE 2B</b></p>		R	

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 14

Paintwork

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Bill No. 14

Paintwork

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 15</u></b></p> <p><b><u>PROVISIONAL AMOUNTS</u></b></p> <p>The following Provisional Amounts are all NET amounts EXCLUSIVE of commission for the Contractor. These amounts are for work to be executed complete by Nominated/Selected Sub-Contractors.</p> <p>Provisional Amounts may be omitted or reduced at the Employer's sole discretion and the contractor shall not be entitled to claim for any <del>loss by way of reductions or omissions of any</del> discount, or percentage relating to Provisional Amounts or P.C. amounts or any loss of profit related thereto.</p>			
	<p><b><u>ELECTRICAL INSTALLATION</u></b></p>			
1	Allow the provisional amount of R 1 771 000.00 (One Million Seven Hundred and Seventy One Thousand Rand) for Electrical Installation	Item		1 771 000.00
2	Profit	Item		
3	Attendance	Item		
	<p><b><u>PROFESSIONAL FEES</u></b></p>			
4	Allow the provisional amount of R 1 012 000.00 (One Million and Twelve Thousand Rand) for Structural Element Design, Monitoring and Certification	Item		1 012 000.00
5	Profit	Item		
	Attendance	Item		
			R	
	<b>Carried to Collection</b>			
	SECTION NO.1 - PHASE 2B-1			
	Bill No. 15			
	Provisional Amounts			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>ENVIRONMENTAL MONITORING AND REPORTING</u></b>				
7	Allow the provisional amount of R 379 500.00 (Three Hundred and Seventy Nine Thousand Five Hundred Rand) for Environmental Monitoring and Reporting as per the approved Environmental Management Programme (EMPr) to Relevant Statutory Authorities	Item		379 500.00
8	Profit	Item		
9	Attendance	Item		
<b><u>BUDGETARY ALLOWANCES</u></b>				
<b><u>The following Budgetary Allowances are for work to be executed by the Contractor and priced at Bill rates or rates to be agreed</u></b>				
<b><u>BUILDERS WORK IN CONNECTION WITH SPECIALIST INSTALLATIONS</u></b>				
10	Allow the Budgetary Amount of R 100 000.00 (One Hundred Thousand Rand) for builders work in connection with specialist installations	Item		100 000.00
<b>Carried to Collection</b>				R
SECTION NO.1 - PHASE 2B-1 Bill No. 15 Provisional Amounts <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.1 - PHASE 2B-1

Bill No. 15

Provisional Amounts

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SECTION NO.1 - PHASE 2B-1

Bill No. 15

Provisional Amounts

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

**SECTION SUMMARY - SECTION NO.1 - PHASE 2B-1**

<b>Bill No</b>		<b>Page No</b>		<b>Amount</b>
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2	Earthworks	13		
3	Concrete, Formwork & Reinforcement	19		
4	Masonry	23		
5	Waterproofing	26		
6	Roof Coverings	29		
7	Carpentry & Joinery	34		
8	Ceilings	37		
9	Ironmongery	40		
10	Metalwork	43		
11	Plastering	46		
12	Plumbing & Drainage	56		
13	Glazing	57		
14	Paintwork	62		
15	Provisional Amounts	65		
	SUB-TOTAL		R	
	Add: Contract Skills Development Goals (0,5%)	%		
	<b>Carried to Form of Tender</b>		R	
	SECTION NO.1 - PHASE 2B-1			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Amount
	<p><b><u>SECTION NO. 2 - PHASE 2B-2</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES</u></b></p>		
1	<p>Allow for all preliminary costs associated with complying with the JBCC Series (Edition 6.2) May 2018 Principal Building Agreement for <b>Phase 2B-2</b>. Refer to <b>Preliminaries</b> Bill of Quantities for detailed clauses for pricing purposes.</p> <p>F:..... V:..... T:.....</p>	Item	
2	<p><b><u>PENALTY FOR LATE COMPLETION :</u></b></p> <p>Contract Period : <i>14 months (Including Builders Break)</i></p> <p>Penalty amount per Calendar day : <i>R 8 600.00</i></p>	Item	
	<p style="text-align: center;"><b>Carried Forward to Summary of Section No. 2</b></p>	R	
	<p>SECTION NO.2 - PHASE 2B-2            Bill No. 1            Preliminaries  <b>PHASE 2B</b></p>		

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>EARTHWORKS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Nature of ground</u></b></p> <p>The Tenderer must acquaint himself with the nature of the material to be excavated. Excavation in 'earth' shall be defined as excavation in all types of material.</p> <p><b><u>Subterranean water</u></b></p> <p>No information regarding subterranean water is available. The Tenderer must acquaint himself of the presence and depth of subterranean water and allow for same in his pricing</p> <p><b><u>Carting away of excavated material</u></b></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><b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p>			
1	To remove sloping banks	m3	216	
2	Trenches	m3	1 064	
	<b>Carried to Collection</b>			
	SECTION NO.2 - PHASE 2B-2 Bill No. 2 Earthworks <b>PHASE 2B</b>			

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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>			
3	Soft rock	m3	88	
4	Hard rock	m3	39	
	<b><u>Extra over all excavations for carting away</u></b>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	1 282	
	<b><u>Risk of collapse of excavations</u></b>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	7 344	
	<b><u>Keeping excavations free of water</u></b>			
7	Keeping excavations free of water other than subterranean water		Item	
	<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u></b>			
8	Backfilling to trenches, holes, etc	m3	113	
	<b><u>Earth filling of G5 material in accordance with SABS 1200 DM supplied by the contractor compacted to 95% Mod AASHTO density</u></b>			
9	Backfilling to trenches, holes, etc	m3	126	
	<b><u>Compaction of surfaces</u></b>			
10	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 93% Mod AASHTO density	m2	3 983	
	<b>Carried to Collection</b>			R
SECTION NO.2 - PHASE 2B-2 Bill No. 2 Earthworks <b>PHASE 2B</b>				



**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.2 - PHASE 2B-2

Bill No. 2

Earthworks

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SECTION NO.2 - PHASE 2B-2

Bill No. 2

Earthworks

**PHASE 2B**

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p>Formwork to sides of 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"</p>			
1	<p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p> <p>Surface blinding under footings and bases m3</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.2 - PHASE 2B-2            Bill No. 3            Concrete, Formwork &amp; Reinforcement  <b>PHASE 2B</b></p>	86		<p style="text-align: right;">R</p>

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<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
	<b><u>30MPa / 19mm concrete</u></b>			
2	Strip footings	m3	58	
3	Foundation beams to raft slab	m3	845	
4	Raft slab	m3	704	
5	Stairs including landings, beams and inverted beams	m3	186	
	<b><u>TEST BLOCKS</u></b>			
6	Making and testing 150 x 150 x 150mm concrete strength test cube	No	2 551	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a power float finish</u></b>			
7	Raft slabs, etc	m2	5 416	
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
	<b><u>Rough formwork to sides</u></b>			
8	Strip footings not exceeding 300mm high	m	370	
9	Ground beams	m2	1 070	
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	6 433	
11	Sloping and stepped outer edges of stairs 330mm high extreme	m	567	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 3 Concrete, Formwork & Reinforcement <b>PHASE 2B</b>			

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Item No		Qty	Rate	Amount
12	<p><b><u>Rough formwork to soffits</u></b> Stairs with sloping soffits</p>	m2	704	
13	<p><b><u>MOVEMENT JOINTS, ETC</u></b> <b><u>Two layers 375 micron plastic slip joints between horizontal concrete and brick surfaces including cement mortar bed</u></b> Not exceeding 300mm wide</p>	m	4 740	
14	<p><b><u>Expansion joints with bitumen impregnated softboard between vertical concrete and block surfaces</u></b> 15mm Joints not exceeding 300mm high</p>	m	798	
15	<p><b><u>Saw cut joints</u></b> 3 x 30mm Saw cut joints in top of concrete</p>	m	473	
16	<p><b><u>REINFORCEMENT</u></b> <b><u>Mild steel reinforcement to structural concrete work</u></b> Bars of various diameters</p>	t	27.82	
17	<p><b><u>High tensile steel reinforcement to structural concrete work</u></b> Bars of various diameters</p>	t	217.00	
<b>Carried to Collection</b>				R
<p>SECTION NO.2 - PHASE 2B-2 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>				

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>DESIGN, SUPPLY &amp; INSTALL THE FOLLOWING</u></b></p>			
<p>Tenderers are advised that only prefabricated beam and block slab systems will be considered for the first floor slab construction.</p>			
<p>The Tenderer shall ensure that all shop drawings are submitted with their tender for approval by the Principal Agent.</p>			
<p><i>Contractor to indicate here the name of the supplier of the beam and block slab proposed :</i></p> <p>.....</p>			
<p>The design, manufacture, supply and installation of the following items shall be under the control of a registered Engineer in accordance with relevant SANS standards. The tenderer shall be required to lodge a written guarantee/certificate for the designed component of each unit from a qualified registered Structural Engineer with the required capability certificate and professional indemnity cover.</p>			
<p>The design shall comply with all relevant SANS standards as well as the National Home Building Registration Council Manual (NHBRC Manual). These include but are not restricted to :</p>			
<ul style="list-style-type: none"> <li>a) Design of Concrete Elements - SANS 0100:2000 Ed2.2</li> <li>b) Loading Code - SANS 10160:2011</li> <li>c) Construction Methods (National Building Regulations) - SANS 10400</li> </ul>			
<p>Tenderers are to refer to drawings annexured to this document.</p> <p>-----</p>			
<p><b>Carried to Collection</b></p>			
<p>SECTION NO.2 - PHASE 2B-2 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>			
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Concrete, Formwork & Reinforcement

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Concrete, Formwork & Reinforcement

**PHASE 2B**

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>BLOCKWORK</u></b></p> <p><b><u>Blockwork</u></b></p> <p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction".</p> <p>Blocks shall comply with SANS 1215 and shall bear the SANS mark.</p> <p>All blocks must be saw cut and not broken with a trowel and prices must include for this.</p> <p>All M150 blocks are to have a minimum compressive strength of 7 MPa.</p> <p>Descriptions of blockwork shall be deemed to include for wedging and pinning against columns, beams, slabs, etc.</p> <p>Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Surfaces to receive bagging shall have flush joints.</p>			
	<b>Carried to Collection</b>			
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Item No		Qty	Rate	Amount
<b><u>SAMPLES</u></b>				
Samples of all masonry building units, except those for walls described as "load 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 to site.				
<b><u>FOUNDATIONS</u></b>				
<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in class I cement mortar</u></b>				
1	140mm Walls in M150 blocks	m2	449	
<b><u>SUPERSTRUCTURE</u></b>				
<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 3,5MPa concrete masonry blocks in Class II cement mortar</u></b>				
2	90mm Walls in M100 blocks	m2	5 100	
3	90mm Shower kerb one course high in M100 blocks	m	220	
<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in Class I cement mortar</u></b>				
4	140mm Walls in M150 blocks	m2	18 158	
5	140mm Walls in M150 blocks in beamfilling	m2	366	
6	140mm Walls in M150 blocks above wall plate level	m2	1 415	
<b>Carried to Collection</b>				R
SECTION NO.2 - PHASE 2B-2 Bill No. 4 Masonry <b>PHASE 2B</b>				

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Item No		Qty	Rate	Amount
	<b><u>BLOCKWORK SUNDRIES</u></b>			
	<b><u>10MPa/19mm Mass concrete filling to cavity of blockwork</u></b>			
7	Mass concrete filling	m3	28	
	<b><u>Galvanised blockwork reinforcement</u></b>			
8	75mm Wide reinforcement built in horizontally	m	67 132	
	<b><u>"Fabcon" or equal approved pre-stressed fabricated lintels</u></b>			
9	90 x 110mm Lintels in lengths not exceeding 3m	m	835	
10	140 x 110mm Lintels in lengths not exceeding 3m	m	2 572	
	<b><u>Galvanised hoop iron cramps, ties, etc</u></b>			
11	30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into blockwork	No	3 167	
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Masonry

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Masonry

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>BILL NO. 5</u></b>				
<b><u>WATERPROOFING</u></b>				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.				
<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
<b><u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or equal approved embossed damp proof course</u></b>				
1	In walls	m2	760	
2	In walls under window cills	m2	212	
<b><u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or equal approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></b>				
3	Under raft slabs	m2	4 128	
4	Sides of ground beams	m2	6 157	
<b><u>PROTECTION TO WATERPROOFING</u></b>				
<b><u>10mm Softboard protection</u></b>				
5	Vertically behind ground beams	m2	618	
<b>Carried to Collection</b>				R
SECTION NO.2 - PHASE 2B-2 Bill No. 5 Waterproofing <b>PHASE 2B</b>				



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Bill No. 5

Waterproofing

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Bill No. 5

Waterproofing

**PHASE 2B**

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b>BILL NO. 6</b></p> <p><b><u>ROOF COVERINGS, ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>			
	<p><b><u>TILES</u></b></p> <p><b><u>420 x 332mm "Marley" or equal approved Double Roman through colour (Slate Grey) concrete roof tiles fixed with suitable non-corrosive storm clips as required nailed through underlay to and including 38 x 38mm sawn softwood battens at 320mm centres</u></b></p>			
1	Roof covering with pitch not exceeding 25 degrees	m2	7 558	
2	Ridge tiles to match roofing tiles including soaker underlay, additional battens, etc and bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	989	
3	Verge capping tiles to match roofing tiles including soaker underlay, additional battens, etc bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	1 635	
4	Ridge end tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour	No	199	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2			
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	Roof Coverings			
	<b>PHASE 2B</b>			

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Item No		Qty	Rate	Amount
5	<p><b><u>"Monier Easyflash" or equal approved 1,4mm thick aluminium composite waterproofing membrane with butyl self adhesive fixed in strict accordance to the manufacturer's instructions</u></b></p> <p>Stepped side wall flashing</p>	m	439	
<b><u>UNDERTILE MEMBRANE</u></b>				
6	<p><b><u>"Marley Econo" or equal approved residential application undertile membrane fixed in strict accordance with the manufacturer's instructions</u></b></p> <p>Undertile membrane laid taut over rafters (at approximately 690mm centres) and fixed concurrent with tilting battens, purlins, etc</p>	m2	5 872	
<b>Carried to Collection</b>				R
<p>SECTION NO.2 - PHASE 2B-2          Bill No. 6          Roof Coverings  <b>PHASE 2B</b></p>				

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Bill No. 6

Roof Coverings

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Roof Coverings

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 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p><b><u>ROOFS, ETC</u></b></p> <p>The design, manufacture and transportation of the roof trusses, bracing, etc shall be under the control of a registered Engineer in accordance with SANS 1900, SANS 10166 and SANS 100163. It shall be required from the manufacturer of the trusses to lodge a written guarantee that his construction has been designed by a qualified Structural Engineer and that he is in possession of a capability certificate issued by the Institute for Timber Construction and approved by the Engineer.</p> <p>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.</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>SECTION NO.2 - PHASE 2B-2          Bill No. 7          Carpentry &amp; Joinery  <b>PHASE 2B</b></p>			R

Item No	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 and permanent bracing	Qty	Rate	Amount
	<p><b><u>Prefabricated plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 690mm centres. Roof Covering is concrete roof tiles on timber battens. Ceilings are 6,4mm plasterboard ceilings. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences.</p> <p><b><u>Sawn softwood trusses</u></b></p>			
1	Double pitched roof truss 3992mm span x 850mm high with 740mm eaves overhang projection both sides	No	51	
2	Double pitched roof truss 4132mm span x 850mm high with 600mm eaves overhang projection one side and 740mm other side	No	103	
3	Double pitched roof truss 4272mm span x 850mm high with 600mm eaves overhang projection both sides	No	103	
4	Double pitched roof truss 6036mm span x 1200mm high with 740mm eaves overhang projection both sides	No	370	
5	Double pitched roof truss 6316mm span x 1200mm high with 600mm eaves overhang projection both sides	No	929	
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<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
6	Double pitched roof truss 6884mm span x 1350mm high with 740mm eaves overhang projection both sides	No	15		
7	Double pitched roof truss 7024mm span x 1350mm high with 600mm eaves projection one side and 740mm other side	No	2		
8	Double pitched roof truss 7164mm span x 1350mm high with 600mm eaves overhang projection both sides	No	11		
<b><u>Sawn softwood</u></b>					
9	38 x 76mm Wall plates	m	1 802		
<b><u>Sundries</u></b>					
10	Two coats creosote on sawn timbers	m2	608		
<b><u>EAVES, VERGES ETC</u></b>					
<b><u>Fibre-cement fascia and barge boards</u></b>					
11	10mm x 225mm Fibre cement fascia board fixed to truss and joined with PVC joiner	m	1 860		
12	8mm x 200 x 80mm Barge board with PVC joiners fixed to brandering	m	1 665		
<b><u>DOORS, ETC</u></b>					
<b><u>Hollow core flush doors with commercial veneer on both sides suitable for painting hung to steel frames</u></b>					
13	40mm Door, 813 x 2032mm high	No	642		
<b><u>Wrot meranti doors hung to steel frames</u></b>					
14	44mm Framed, ledged and braced batten door 813 x 2032mm high filled in with 22mm V-jointed boarding both sides	No	426		
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Bill No. 7

Carpentry & Joinery

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Bill No. 7

Carpentry & Joinery

**PHASE 2B**

Item No		Unit	Qty	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>CEILINGS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 elsewhere</p>				
	<p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>6,4mm Gypsum plasterboard with taped and skimmed joints</u></b></p>				
1	Ceilings including 38 x 38mm SA Pine brandering at 400mm centres	m2	4 725		
2	Extra over ceiling and brandering for 650 x 650mm trap door of 38 x 38mm wrot softwood rebated framing with 38 x 114mm sawn softwood trimmers covered with ceiling board and fitted flush in opening with 19 x 50mm wrot softwood fillet all round	No	214		
	<p><b><u>Gypsum plasterboard cornices</u></b></p>				
3	50 x 50mm cornice fixed to ceiling/wall with cornice adhesive	m	7 760		
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	SECTION NO.2 - PHASE 2B-2				
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	Ceilings				
	<b>PHASE 2B</b>				



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SECTION NO.2 - PHASE 2B-2

Bill No. 8

Ceilings

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Bill No. 8

Ceilings

**PHASE 2B**

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Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Finishes to ironmongery</u></b></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p>			
	<p><b><u>LOCKS</u></b></p> <p><b><u>"Union" or equal approved</u></b></p>			
1	Two lever mortice lockset with CB furniture	No	633	
2	Three lever mortice lockset with CB furniture	No	426	
	<p><b><u>BATHROOM FITTINGS</u></b></p>			
3	Chromium plated toilet roll holder	No	214	
	<b>Carried to Collection</b>			
	SECTION NO.2 - PHASE 2B-2 Bill No. 9 Ironmongery <b>PHASE 2B</b>			
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Item No		Qty	Rate	Amount
	<b><u>"Chairman Industries" or equal approved</u></b>			
4	"Railman" (Code DL2) Stainless steel side wall grab rail with dogleg shape 32mm diameter x 900mm long fixed to wall as per engineers specifications	No	2	
5	"Railman" (Code SR2) Stainless steel side wall straight grab rail 32mm diameter x 750mm long fixed to wall as per engineers specifications	No	2	
6	"Railman" (Code XC) Stainless steel shower corner rail 32mm diameter x 650 x 650 x 90mm overall length fixed to wall as per engineers specifications	No	2	
7	"Railman" (Code XS) Stainless steel fold up shower seat 460 x 480mm long fixed to wall as per engineers specifications	No	2	
	<b><u>SUNDRIES</u></b>			
8	Rubber door stop plugged	No	1 068	
	<b>Carried to Collection</b>			
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Ironmongery

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Bill No. 9

Ironmongery

**PHASE 2B**

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Descriptions</u></b></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 of concrete</p> <p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Glazing to aluminum window to be 4mm float glass and obscure glass to W3 top hung sash</p>			
	<p><b><u>GALVANIZED STEEL BALUSTRADES, ETC</u></b></p> <p><b><u>Welded balustrading to staircase</u></b></p>			
1	<p>Raking balustrading 1264mm high formed of 40 x 40mm square hollow section continuous top and bottom rails filled in with 30 x 30mm square hollow section horizontal rails at 100mm centres and 40 x 40mm square hollow section stanchions at average 1m centres bolted to side of concrete stairs with 2 No. M16 anchor bolts at 500mm centres</p>	m	608	
	<b>Carried to Collection</b>			R
	<p>SECTION NO.2 - PHASE 2B-2 Bill No. 10 Metalwork <b>PHASE 2B</b></p>			

Item No		Qty	Rate	Amount
<b><u>GALVANIZED PRESSED STEEL DOOR FRAMES</u></b>				
<b><u>"Durowin" or equal approved 1mm thick single rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 90mm block walls</u></b>				
2	Frame for door 813 x 2032mm high	No	642	
<b><u>"Durowin" or equal approved 1,2mm thick double rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 140mm block walls</u></b>				
3	Frame for door 813 x 2032mm high	No	426	
<b><u>GALVANIZED STEEL WINDOWS, DOORS, ETC</u></b>				
<b><u>"Durowin" Standard residential windows</u></b>				
4	Window Type NE1 (Code W3), 533 x 654mm high	No	188	
5	Window Type NC1 (Code W4), 533 x 949mm high	No	26	
6	Window Type NC7 (Code W2), 1022 x 949mm high	No	1 038	
7	Window Type ND7 (Code W1), 1022 x 1245mm high	No	240	
8	Aluminium 30.5 casement (Class1) 25 micron natural anodized, complete, 533 x 654mm	No	1	Rate only
9	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 949mm	No	1	Rate only
10	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 949mm	No	1	Rate only
11	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 1245mm	No	1	Rate only
<b>Carried to Collection</b>				R
SECTION NO.2 - PHASE 2B-2 Bill No. 10 Metalwork <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.2 - PHASE 2B-2

Bill No. 10

Metalwork

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SECTION NO.2 - PHASE 2B-2

Bill No. 10

Metalwork

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<b><u>Untinted granolithic on concrete</u></b>			
1	25mm Thick on treads and risers of stairs including reedings	m2	1 109	
	<b><u>Untinted granolithic screed with "Sikalite" or equal approved waterproofing admixture on concrete applied in strict accordance with the manufacturers instructions</u></b>			
2	Average 60mm thick on shower floors to falls	m2	173	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster on blockwork and small part on concrete</u></b>			
3	On walls	m2	26 671	
4	On narrow widths	m2	1 269	
	<b><u>Cement plaster with "Sikalite" or equal approved waterproofing admixture on blockwork applied in strict accordance with the manufacturers instructions</u></b>			
5	On walls	m2	3 677	
6	On narrow widths	m2	116	
	<b><u>Cement plaster on concrete</u></b>			
7	On raking soffits of stairs	m2	704	
8	On narrow widths	m2	146	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 11 Plastering <b>PHASE 2B</b>			



**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.2 - PHASE 2B-2

Bill No. 11

Plastering

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SECTION NO.2 - PHASE 2B-2

Bill No. 11

Plastering

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

**Item  
No**

**Qty**

**Rate**

**Amount**

**BILL NO. 12**

**PLUMBING AND DRAINAGE**

**SUPPLEMENTARY PREAMBLES**

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.

**High density polyethylene pipes :**

Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips at maximum 500mm centres, with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions

All pipe diameters are nominal external

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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 push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

**Carried to Collection**

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SECTION NO.2 - PHASE 2B-2  
Bill No. 12  
Plumbing & Drainage  
**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>Fixing of pipes</u></b></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><b><u>Reducing fittings</u></b></p> <p>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</p> <p><b><u>Laying, backfilling, bedding, etc. of pipes</u></b></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following:  SANS 1200 L : Medium-pressure pipelines  LD : Sewers  LE : Stormwater drainage  Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200  DB : Earthworks (Pipe trenches)  Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200  LB : Bedding (Pipes).  Unless otherwise described bedding of rigid pipes shall be class B bedding</p>			
<p><b>Carried to Collection</b></p>			R
<p>SECTION NO.2 - PHASE 2B-2  Bill No. 12  Plumbing &amp; Drainage  <b>PHASE 2B</b></p>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>Flush pans</u></b></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><b><u>Stainless steel sinks</u></b></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><b><u>Waste unions</u></b></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><b><u>Sealing around sanitary fittings, etc</u></b></p> <p>Joints around sanitary fittings at junction with walls, etc are to be sealed with an approved silicone sealant and prices shall include for this</p>			
	<p><b><u>STORMWATER DRAINAGE</u></b></p> <p><b><u>Normal duty uPVC pipes</u></b></p>			
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	2 568	
	<p><b><u>Extra over normal duty uPVC pipes for fittings</u></b></p>			
2	110mm Bend	No	428	
3	110mm Access Junction	No	216	
	<b>Carried to Collection</b>			
	SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

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Item No		Qty	Rate	Amount
<b><u>Precast Concrete Gulleys</u></b>				
4	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	428	
<b><u>SOIL DRAINAGE</u></b>				
<b><u>Normal duty uPVC pipes</u></b>				
5	110mm Pipes laid in and including trenches not exceeding 1m deep	m	3 050	
<b><u>Extra over normal duty uPVC pipes for fittings</u></b>				
6	110mm Bend	No	1 076	
7	110mm Junction	No	216	
8	110mm Access Junction	No	216	
9	110mm Access reducing junction	No	212	
10	110mm Diameter rodding eye consisting of plain bend at bottom jointed to drain pipe, vertical piping not exceeding 1000mm long including all necessary slow bends, cast iron 'ABC' cover and frame, 150mm thick mass concrete 15MPa/19mm surround all round and including all necessary additional excavation, etc	No	214	
<b><u>Precast Concrete Gulleys</u></b>				
11	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	400	
<b>Carried to Collection</b>				R
SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>Connection</u></b>			
12	Locating and cutting into side of existing 160mm pipe for and connecting 110mm pipe including inserting 110mm junction	No	214	
	<b><u>Sundries to drainage</u></b>			
13	25mm Diameter hole through 140mm blockwall	No	428	
	<b><u>PLUMBING</u></b>			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>"Marley Vynadeep" or equal approved uPVC</u></b>			
14	125mm Half round eaves gutters with beaded front edge	m	1 860	
15	Extra over eaves gutter for stopped end	No	856	
16	Extra over eaves gutter for outlet for 75mm diameter pipe	No	428	
	<b><u>uPVC pipes</u></b>			
17	75mm rainwater pipes	m	2 403	
18	Extra over 75mm rainwater pipe for bend	No	856	
19	Extra over 75mm rainwater pipe for shoe	No	428	
	<b><u>SANITARY FITTINGS</u></b>			
	<b><u>Stainless steel sinks</u></b>			
20	Single end bowl sink size 900 x 535mm with chromium plated grating, waste, plug with stirrup, chain and stay, fixed to block wall with and including galvanised gallow brackets (taps, trap elsewhere)	No	214	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

Item No		Qty	Rate	Amount
	<b><u>Glazed ceramic fittings</u></b>			
21	White basin, size 560 x 405mm, with 38mm chromium plated waste union, with one tap hole, anti-theft plug with spindle fixed to wall with and including two 10mm bolts (Taps, traps elsewhere)	No	212	
22	White low-level 90 degree outlet WC suite including matching 4,5 litre low flush cistern and heavy duty white plastic double flap seat	No	212	
	<b><u>"Vaal" or equal approved</u></b>			
23	"Protea Paraplegic" 90° outlet pan (code 750246) and matching 9 litre cistern (code 7116LP) complete with lid, fitments, and purpose-made C.P. side-flush lever (left or right). Bottom inlet water supply must be on same side as flush lever including double flap seat & cover (code 411-65533) (traps, taps elsewhere measured)	No	2	
24	Rounded 510 x 405 x 130mm deep "Hibiscus" basin with one semi-punched tapholes, integrated overflow, and chainstay hole through the centre semi-punched taphole fixed to wall using two 10 mm bolts (code 8448Z0) or as per engineers specifications (waste, taps and traps elsewhere measured)	No	2	
	<b><u>TRAPS, ETC</u></b>			
	<b><u>Flexible rubber</u></b>			
25	50mm Deep seal rubber P-trap	No	428	
	<b><u>Brass</u></b>			
26	50mm Rough brass shower P-trap with CP grating	No	214	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>TAPS, VALVES, ETC</u></b>				
27	15mm Stopcock	No	428	
28	22mm Stopcock	No	426	
<b><u>"Cobra Watertech" or equal approved</u></b>				
29	15mm "Cobra 111" Star chromium plated pillartap	No	424	
30	15mm "500 Series (Code 503-21b)" Chromium plated elbow action pillartap	No	4	
31	15mm "Cobra 128" Star chromium plated underwall pattern stoptap	No	214	
32	15mm "Cobra 027" Chromium plated overhead shower arm	No	212	
33	15mm "Cobra 068BJ" Chromium plated shower rose	No	212	
34	15mm "TVSH1202/CH" Chromium plated 1 function hand shower including water saving insert and 1500mm chrome flexible hose with wall bracket brass outlet (Code TVSH1397/CH)	No	2	
<b><u>SANITARY PLUMBING</u></b>				
<b><u>Soil, waste &amp; vent uPVC pipes</u></b>				
35	50mm Pipes to walls, columns, soffits, etc	m	1 449	
36	110mm Pipes to walls, columns, soffits, etc	m	407	
<b><u>Extra over uPVC pipes for fittings</u></b>				
37	50mm Access bend	No	856	
38	50mm Junction	No	214	
<b>Carried to Collection</b>				R
SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>				

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**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
39	110mm x 245mm Long "Wirquin Soupless" flexible fitting	No	214		
40	110mm Access bend	No	214		
41	110mm Access junction	No	214		
42	110mm Pan connector	No	214		
43	110 x 50mm Access reducing junction	No	214		
44	50mm "GI One way" vent valve	No	214		
45	110mm "GI Two way" vent valve	No	214		
<b><u>WATER SUPPLIES</u></b>					
<b><u>HDPE Class 12 rigid high density polyethylene pipes with plastic compression fittings</u></b>					
46	16mm Pipes laid in and including trenches not exceeding 1m deep	m	2 568		
47	16mm Pipes to walls, soffits ,etc	m	3 210		
48	25mm Pipes to walls, soffits ,etc	m	2 776		
49	32mm Pipes to walls, soffits ,etc	m	1 070		
<b><u>Extra over rigid high density polyethylene pipes for plastic compression fittings</u></b>					
50	16mm Fittings	No	2 782		
51	25mm Fittings	No	1 496		
52	32mm Elbow	No	428		
53	32 x 25mm Reducing tee	No	214		
<b>Carried to Collection</b>					R
SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Connection</u></b>			
54	Cutting into existing water supply pipe for and including connection with 16mm pipe including all fittings, etc	No	214	
	<b><u>COLLECT FROM STORES AND FIX ONLY THE FOLLOWING</u></b>			
	<b><u>Collect from eThekweni Municipality Store in Springfield Park, Durban</u></b>			
55	100 Litre water storage tank size approximately 800mm wide x 1000mm long placed in position between roof trusses in roof space	No	214	
	<b><u>TESTING</u></b>			
56	Testing the whole of the water supply and sanitary pipe system including fittings	No	214	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.2 - PHASE 2B-2

Bill No. 12

Plumbing & Drainage

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Bill No. 12

Plumbing & Drainage

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<b><u>4mm Clear float glass</u></b>			
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	1 006	
2	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	319	
	<b><u>4mm Obscure glass</u></b>			
3	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	66	
	<b><u>MIRRORS</u></b>			
	<b><u>4mm Silvered float glass copper backed mirrors with bevelled edges holed for and fixed to blockwork</u></b>			
4	Mirror 500 x 600mm high	No	2	
	<b>Carried Forward to Summary of Section No. 2</b>			
	SECTION NO.2 - PHASE 2B-2 Bill No. 13 Glazing <b>PHASE 2B</b>			
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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>SABS Specifications</u></b></p> <p>High gloss enamel paint : SANS 630 Grade I</p> <p>Oil gloss enamel paint : SANS 631</p> <p>Primers for wood for external work : SANS 678 Type I</p> <p>Primers for wood for internal work : SANS 678 Type III</p> <p>Zink chromate primers for steel : SANS 679 Type I</p> <p>Wash primer (metal etch) : SANS 723</p> <p>Varnish for interior use : SANS 887 Type I</p> <p>Emulsion paints : SANS 1586</p>			
	<p><b><u>PAINTWORK, ETC TO NEW WORK</u></b></p> <p><b><u>ON SCREEDED FLOORS</u></b></p> <p><b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b></p>			
1	On granolithic screeded shower floors	m2	173	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON BAGGED BLOCKWORK</u></b>			
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat Stipple Texture PVA emulsion paint</u></b>			
2	On soffit of precast beam and block slab	m2	4 821	
	<b><u>ON FLOATED PLASTER</u></b>			
	<b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b>			
3	On internal shower walls	m2	1 393	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat PVA emulsion paint</u></b>			
4	On internal walls	m2	31 627	
5	On external walls	m2	16 741	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
6	On ceilings and beams	m2	847	
	<b><u>ON PLASTER BOARD</u></b>			
	<b><u>One coat primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
	On ceilings and cornices	m2	4 725	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2			
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	Paintwork			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON FIBRE-CEMENT</u></b>			
	<b><u>One coat primer, one undercoat and two coats pure acrylic emulsion paint</u></b>			
7	On fascias and barge boards	m2	1 331	
	<b><u>ON METAL</u></b>			
	<b><u>One coat calcium plumbate primer</u></b>			
8	On backs of frames not exceeding 300mm girth	m	5 442	
	<b><u>One coat galvanised iron cleaning primer, one coat calcium plumbate primer, one undercoat and one finishing coat polyurethane velvet enamel paint on galvanised steel</u></b>			
9	On door frames	m2	1 545	
10	On windows	m2	2 782	
11	On balustrades (both sides measured over the full flat area)	m2	1 560	
	<b><u>ON WOOD</u></b>			
	<b><u>One coat wood primer, one undercoat and one finishing coat polyurethane velvet enamel paint</u></b>			
12	On doors	m2	2 238	
	<b><u>Two coats exterior quality clear polyurethane varnish</u></b>			
13	On doors	m2	1 648	
	<b>Carried to Collection</b>			R
	SECTION NO.2 - PHASE 2B-2 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>HOUSE NUMBERING</u></b></p> <p><b><u>150mm High by 100mm wide black lettering painted using approved stencils - priced per set of 4 digits per unit</u></b></p>			
14	On painted walls	No	214	
	<p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.2 - PHASE 2B-2            Bill No. 14            Paintwork  <b>PHASE 2B</b></p>		R	

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.2 - PHASE 2B-2

Bill No. 14

Paintwork

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Bill No. 14

Paintwork

**PHASE 2B**

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 15</u></b>			
	<b><u>PROVISIONAL AMOUNTS</u></b>			
	The following Provisional Amounts are all NET amounts EXCLUSIVE of commission for the Contractor. These amounts are for work to be executed complete by Nominated/Selected Sub-Contractors.			
	Provisional Amounts may be omitted or reduced at the Employer's sole discretion and the contractor shall not be entitled to claim for any <del>loss by way of reductions or omissions of any</del> discount, or percentage relating to Provisional Amounts or P.C. amounts or any loss of profit related thereto.			
	<b><u>ELECTRICAL INSTALLATION</u></b>			
1	Allow the provisional amount of R 1 498 000.00 (One Million Four Hundred and Ninety Eight Thousand Rand) for Electrical Installation	Item		1 498 000.00
2	Profit	Item		
3	Attendance	Item		
	<b><u>PROFESSIONAL FEES</u></b>			
4	Allow the provisional amount of R 856 000.00 (Eight Hundred and Fifty Six Thousand Rand) for Structural Element Design, Monitoring and Certification	Item		856 000.00
5	Profit	Item		
6	Attendance	Item		
	<b>Carried to Collection</b>			
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	Bill No. 15			
	Provisional Amounts			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>ENVIRONMENTAL MONITORING AND REPORTING</u></b>				
7	Allow the provisional amount of R 321 000.00 (Three Hundred and Twenty One Thousand Rand) for Environmental Monitoring and Reporting as per the approved Environmental Management Programme (EMPr) to Relevant Statutory Authorities	Item		321 000.00
8	Profit	Item		
9	Attendance	Item		
<b><u>BUDGETARY ALLOWANCES</u></b>				
<b><u>The following Budgetary Allowances are for work to be executed by the Contractor and priced at Bill rates or rates to be agreed</u></b>				
<b><u>BUILDERS WORK IN CONNECTION WITH SPECIALIST INSTALLATIONS</u></b>				
10	Allow the Budgetary Amount of R 100 000.00 (One Hundred Thousand Rand) for builders work in connection with specialist installations	Item		100 000.00
<b>Carried to Collection</b>				R
SECTION NO.2 - PHASE 2B-2 Bill No. 15 Provisional Amounts <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.2 - PHASE 2B-2

Bill No. 15

Provisional Amounts

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SECTION NO.2 - PHASE 2B-2

Bill No. 15

Provisional Amounts

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

**SECTION SUMMARY - SECTION NO.2 - PHASE 2B-2**

<b>Bill No</b>		<b>Page No</b>		<b>Amount</b>
1	Preliminaries	67		
2	Earthworks	71		
3	Concrete, Formwork & Reinforcement	77		
4	Masonry	81		
5	Waterproofing	84		
6	Roof Coverings	87		
7	Carpentry & Joinery	92		
8	Ceilings	95		
9	Ironmongery	98		
10	Metalwork	101		
11	Plastering	104		
12	Plumbing & Drainage	114		
13	Glazing	115		
14	Paintwork	120		
15	Provisional Amounts	123		
	SUB-TOTAL		R	
	Add: Contract Skills Development Goals (0,5%)	%		
	<b>Carried to Form of Tender</b>		R	
	<b>SECTION NO.2 - PHASE 2B-2</b>			
	<b>PHASE 2B</b>			

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Amount
	<p><b><u>SECTION NO. 3 - PHASE 2B-3</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES</u></b></p>		
1	<p>Allow for all preliminary costs associated with complying with the JBCC Series (Edition 6.2) May 2018 Principal Building Agreement for <b>Phase 2B-3</b>. Refer to <b>Preliminaries</b> Bill of Quantities for detailed clauses for pricing purposes.</p> <p>F:..... V:..... T:.....</p>	Item	
2	<p><b><u>PENALTY FOR LATE COMPLETION :</u></b></p> <p>Contract Period : <i>14 months (Including Builders Break)</i></p> <p>Penalty amount per Calendar day : <i>R 9 000.00</i></p>	Item	
	<p style="text-align: center;"><b>Carried Forward to Summary of Section No. 3</b></p>	R	
	<p>SECTION NO.3 - PHASE 2B-3 Bill No. 1 Preliminaries <b>PHASE 2B</b></p>		

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>EARTHWORKS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Nature of ground</u></b></p> <p>The Tenderer must acquaint himself with the nature of the material to be excavated. Excavation in 'earth' shall be defined as excavation in all types of material.</p> <p><b><u>Subterranean water</u></b></p> <p>No information regarding subterranean water is available. The Tenderer must acquaint himself of the presence and depth of subterranean water and allow for same in his pricing</p> <p><b><u>Carting away of excavated material</u></b></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><b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p>			
1	To remove sloping banks	m3	278	
2	Trenches	m3	1 367	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 2 Earthworks <b>PHASE 2B</b>			

Item No		Qty	Rate	Amount
	<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>			
3	Soft rock	m3	113	
4	Hard rock	m3	50	
	<b><u>Extra over all excavations for carting away</u></b>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	1 647	
	<b><u>Risk of collapse of excavations</u></b>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	9 438	
	<b><u>Keeping excavations free of water</u></b>			
7	Keeping excavations free of water other than subterranean water		Item	
	<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u></b>			
8	Backfilling to trenches, holes, etc	m3	146	
	<b><u>Earth filling of G5 material in accordance with SABS 1200 DM supplied by the contractor compacted to 95% Mod AASHTO density</u></b>			
9	Backfilling to trenches, holes, etc	m3	162	
	<b><u>Compaction of surfaces</u></b>			
10	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 93% Mod AASHTO density	m2	5 118	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3			
	Bill No. 2			
	Earthworks			
	<b>PHASE 2B</b>			

Item No	<u>Prescribed density tests on filling</u>	No	Qty	Rate	Amount
11	"Modified AASHTO Density" test		275		
<b><u>SOIL POISONING</u></b>					
<b><u>Soil insecticide</u></b>					
12	Under floors, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	5 118		
13	Ditto but to bottom and sides of ground beam	m2	10 508		
<b>Carried to Collection</b>					R
SECTION NO.3 - PHASE 2B-3 Bill No. 2 Earthworks <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 2

Earthworks

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SECTION NO.3 - PHASE 2B-3

Bill No. 2

Earthworks

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p>Formwork to sides of 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"</p>			
1	<p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p> <p>Surface blinding under footings and bases m3</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.3 - PHASE 2B-3 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>	110		<p style="text-align: right;">R</p>

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
	<b><u>30MPa / 19mm concrete</u></b>			
2	Strip footings	m3	74	
3	Foundation beams to raft slab	m3	1 086	
4	Raft slab	m3	905	
5	Stairs including landings, beams and inverted beams	m3	239	
	<b><u>TEST BLOCKS</u></b>			
6	Making and testing 150 x 150 x 150mm concrete strength test cube	No	3 278	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a power float finish</u></b>			
7	Raft slabs, etc	m2	6 960	
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
	<b><u>Rough formwork to sides</u></b>			
8	Strip footings not exceeding 300mm high	m	476	
9	Ground beams	m2	1 375	
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	8 267	
11	Sloping and stepped outer edges of stairs 330mm high extreme	m	729	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 3 Concrete, Formwork & Reinforcement <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Rough formwork to soffits</u></b>			
12	Stairs with sloping soffits	m2	905	
	<b><u>MOVEMENT JOINTS, ETC</u></b>			
	<b><u>Two layers 375 micron plastic slip joints between horizontal concrete and brick surfaces including cement mortar bed</u></b>			
13	Not exceeding 300mm wide	m	6 091	
	<b><u>Expansion joints with bitumen impregnated softboard between vertical concrete and block surfaces</u></b>			
14	15mm Joints not exceeding 300mm high	m	1 026	
	<b><u>Saw cut joints</u></b>			
15	3 x 30mm Saw cut joints in top of concrete	m	608	
	<b><u>REINFORCEMENT</u></b>			
	<b><u>Mild steel reinforcement to structural concrete work</u></b>			
16	Bars of various diameters	t	35.75	
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>			
17	Bars of various diameters	t	278.85	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3			
	Bill No. 3			
	Concrete, Formwork & Reinforcement			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>DESIGN, SUPPLY &amp; INSTALL THE FOLLOWING</u></b></p> <p>Tenderers are advised that only prefabricated beam and block slab systems will be considered for the first floor slab construction.</p> <p>The Tenderer shall ensure that all shop drawings are submitted with their tender for approval by the Principal Agent.</p> <p><i>Contractor to indicate here the name of the supplier of the beam and block slab proposed :</i></p> <p>.....</p> <p>The design, manufacture, supply and installation of the following items shall be under the control of a registered Engineer in accordance with relevant SANS standards. The tenderer shall be required to lodge a written guarantee/certificate for the designed component of each unit from a qualified registered Structural Engineer with the required capability certificate and professional indemnity cover.</p> <p>The design shall comply with all relevant SANS standards as well as the National Home Building Registration Council Manual (NHBRC Manual). These include but are not restricted to :</p> <ul style="list-style-type: none"> <li>a) Design of Concrete Elements - SANS 0100:2000 Ed2.2</li> <li>b) Loading Code - SANS 10160:2011</li> <li>c) Construction Methods (National Building Regulations) - SANS 10400</li> </ul> <p>Tenderers are to refer to drawings annexured to this document.</p> <p>-----</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.3 - PHASE 2B-3 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>			R

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>FIRST FLOOR SLAB</u></b>			
	<b><u>Design, supply and install prefabricated beam and block first floor slab complete with pre-stressed reinforced concrete beams, approved blocks laid end to end in rows, concrete topping, mesh and bar reinforcement, temporary propping, expansion joints, powerfloated finish to top and 5mm thick cement bagging finish to soffit, designed for a Imposed Load of not less than 2kN/m2 (As per SANS 10160 Table 1). Slab thickness not to exceed 200mm overall</u></b>			
18	First floor slab on 7MPa loadbearing blockwork size 6250 x 4070mm overall on plan and 2,4m above bearing level including 1025 x 2900mm opening for staircase with beams/lintols spanning a length of 6250mm (Unit Type A) (Blockwork and staircase elsewhere measured)	No 239		
19	First floor slab on 7MPa loadbearing blockwork size 6140 x 4272mm overall on plan and 2,4m above bearing level including L-shaped opening for staircase 4150mm girth x 900mm wide, with beams/lintols spanning a length of 6140mm (Unit Type B) (Blockwork and staircase elsewhere measured)	No 33		
	<b>Carried to Collection</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 3 Concrete, Formwork & Reinforcement <b>PHASE 2B</b>			

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**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 3

Concrete, Formwork & Reinforcement

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SECTION NO.3 - PHASE 2B-3

Bill No. 3

Concrete, Formwork & Reinforcement

**PHASE 2B**

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>BLOCKWORK</u></b></p> <p><b><u>Blockwork</u></b></p> <p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction".</p> <p>Blocks shall comply with SANS 1215 and shall bear the SANS mark.</p> <p>All blocks must be saw cut and not broken with a trowel and prices must include for this.</p> <p>All M150 blocks are to have a minimum compressive strength of 7 MPa.</p> <p>Descriptions of blockwork shall be deemed to include for wedging and pinning against columns, beams, slabs, etc.</p> <p>Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Surfaces to receive bagging shall have flush joints.</p>			
	<b>Carried to Collection</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 4 Masonry <b>PHASE 2B</b>			
			R	

Item No		Qty	Rate	Amount
	<b><u>SAMPLES</u></b>			
	Samples of all masonry building units, except those for walls described as "load 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 to site.			
	<b><u>FOUNDATIONS</u></b>			
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in class I cement mortar</u></b>			
1	140mm Walls in M150 blocks	m2	578	
	<b><u>SUPERSTRUCTURE</u></b>			
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 3,5MPa concrete masonry blocks in Class II cement mortar</u></b>			
2	90mm Walls in M100 blocks	m2	6 553	
3	90mm Shower kerb one course high in M100 blocks	m	283	
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in Class I cement mortar</u></b>			
4	140mm Walls in M150 blocks	m2	23 334	
5	140mm Walls in M150 blocks in beamfilling	m2	470	
6	140mm Walls in M150 blocks above wall plate level	m2	1 818	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3			
	Bill No. 4			
	Masonry			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>BLOCKWORK SUNDRIES</u></b>				
<b><u>10MPa/19mm Mass concrete filling to cavity of blockwork</u></b>				
7	Mass concrete filling	m3	36	
<b><u>Galvanised blockwork reinforcement</u></b>				
8	75mm Wide reinforcement built in horizontally	m	86 268	
<b><u>"Fabcon" or equal approved pre-stressed fabricated lintels</u></b>				
9	90 x 110mm Lintels in lengths not exceeding 3m	m	1 073	
10	140 x 110mm Lintels in lengths not exceeding 3m	m	3 306	
<b><u>Galvanised hoop iron cramps, ties, etc</u></b>				
11	30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into blockwork	No	4 070	
<b>Carried to Collection</b>				R
SECTION NO.3 - PHASE 2B-3 Bill No. 4 Masonry <b>PHASE 2B</b>				

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SECTION NO.3 - PHASE 2B-3

Bill No. 4

Masonry

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SECTION NO.3 - PHASE 2B-3

Bill No. 4

Masonry

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 5</u></b></p> <p><b><u>WATERPROOFING</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>			
	<p><b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b></p> <p><b><u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or equal approved embossed damp proof course</u></b></p>			
1	In walls	m2	976	
2	In walls under window cills	m2	272	
	<p><b><u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or equal approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></b></p>			
3	Under raft slabs	m2	5 305	
4	Sides of ground beams	m2	7 912	
	<p><b><u>PROTECTION TO WATERPROOFING</u></b></p> <p><b><u>10mm Softboard protection</u></b></p>			
5	Vertically behind ground beams	m2	795	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3			
	Bill No. 5			
	Waterproofing			
	<b>PHASE 2B</b>			



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 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 5

Waterproofing

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SECTION NO.3 - PHASE 2B-3

Bill No. 5

Waterproofing

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b>BILL NO. 6</b></p> <p><b><u>ROOF COVERINGS, ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>			
	<p><b><u>TILES</u></b></p> <p><b><u>420 x 332mm "Marley" or equal approved Double Roman through colour (Slate Grey) concrete roof tiles fixed with suitable non-corrosive storm clips as required nailed through underlay to and including 38 x 38mm sawn softwood battens at 320mm centres</u></b></p>			
1	Roof covering with pitch not exceeding 25 degrees	m2	9 713	
2	Ridge tiles to match roofing tiles including soaker underlay, additional battens, etc and bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	1 271	
3	Verge capping tiles to match roofing tiles including soaker underlay, additional battens, etc bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	2 101	
4	Ridge end tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour	No	256	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 6 Roof Coverings <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
5	<p><b><u>"Monier Easyflash" or equal approved 1,4mm thick aluminium composite waterproofing membrane with butyl self adhesive fixed in strict accordance to the manufacturer's instructions</u></b></p> <p>Stepped side wall flashing</p>	m	564	
<b><u>UNDERTILE MEMBRANE</u></b>				
6	<p><b><u>"Marley Econo" or equal approved residential application undertile membrane fixed in strict accordance with the manufacturer's instructions</u></b></p> <p>Undertile membrane laid taut over rafters (at approximately 690mm centres) and fixed concurrent with tilting battens, purlins, etc</p>	m2	7 546	
<b>Carried to Collection</b>				R
<p>SECTION NO.3 - PHASE 2B-3 Bill No. 6 Roof Coverings <b>PHASE 2B</b></p>				

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SECTION NO.3 - PHASE 2B-3

Bill No. 6

Roof Coverings

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SECTION NO.3 - PHASE 2B-3

Bill No. 6

Roof Coverings

**PHASE 2B**

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p><b><u>ROOFS, ETC</u></b></p> <p>The design, manufacture and transportation of the roof trusses, bracing, etc shall be under the control of a registered Engineer in accordance with SANS 1900, SANS 10166 and SANS 100163. It shall be required from the manufacturer of the trusses to lodge a written guarantee that his construction has been designed by a qualified Structural Engineer and that he is in possession of a capability certificate issued by the Institute for Timber Construction and approved by the Engineer.</p> <p>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.</p>			
<p style="text-align: right;"><b>Carried to Collection</b></p> <p>SECTION NO.3 - PHASE 2B-3            Bill No. 7            Carpentry &amp; Joinery  <b>PHASE 2B</b></p>		R	

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	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 and permanent bracing	Qty	Rate	Amount
	<p><b><u>Prefabricated plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 690mm centres. Roof Covering is concrete roof tiles on timber battens. Ceilings are 6,4mm plasterboard ceilings. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences.</p> <p><b><u>Sawn softwood trusses</u></b></p>			
1	Double pitched roof truss 3992mm span x 850mm high with 740mm eaves overhang projection both sides	No	66	
2	Double pitched roof truss 4132mm span x 850mm high with 600mm eaves overhang projection one side and 740mm other side	No	132	
3	Double pitched roof truss 4272mm span x 850mm high with 600mm eaves overhang projection both sides	No	132	
4	Double pitched roof truss 6036mm span x 1200mm high with 740mm eaves overhang projection both sides	No	476	
5	Double pitched roof truss 6316mm span x 1200mm high with 600mm eaves overhang projection both sides	No	1 194	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 7 Carpentry & Joinery <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
6	Double pitched roof truss 6884mm span x 1350mm high with 740mm eaves overhang projection both sides	No	19		
7	Double pitched roof truss 7024mm span x 1350mm high with 600mm eaves projection one side and 740mm other side	No	3		
8	Double pitched roof truss 7164mm span x 1350mm high with 600mm eaves overhang projection both sides	No	14		
<b><u>Sawn softwood</u></b>					
9	38 x 76mm Wall plates	m	2 316		
<b><u>Sundries</u></b>					
10	Two coats creosote on sawn timbers	m2	781		
<b><u>EAVES, VERGES ETC</u></b>					
<b><u>Fibre-cement fascia and barge boards</u></b>					
11	10mm x 225mm Fibre cement fascia board fixed to truss and joined with PVC joiner	m	2 390		
12	8mm x 200 x 80mm Barge board with PVC joiners fixed to brandering	m	2 140		
<b><u>DOORS, ETC</u></b>					
<b><u>Hollow core flush doors with commercial veneer on both sides suitable for painting hung to steel frames</u></b>					
13	40mm Door, 813 x 2032mm high	No	825		
<b><u>Wrot meranti doors hung to steel frames</u></b>					
14	44mm Framed, ledged and braced batten door 813 x 2032mm high filled in with 22mm V-jointed boarding both sides	No	547		
<b>Carried to Collection</b>					
SECTION NO.3 - PHASE 2B-3					
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**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 7

Carpentry & Joinery

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SECTION NO.3 - PHASE 2B-3

Bill No. 7

Carpentry & Joinery

**PHASE 2B**

Item No		Unit	Qty	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>CEILINGS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 elsewhere</p>				
	<p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>6,4mm Gypsum plasterboard with taped and skimmed joints</u></b></p>				
1	Ceilings including 38 x 38mm SA Pine brandering at 400mm centres	m2	6 072		
2	Extra over ceiling and brandering for 650 x 650mm trap door of 38 x 38mm wrot softwood rebated framing with 38 x 114mm sawn softwood trimmers covered with ceiling board and fitted flush in opening with 19 x 50mm wrot softwood fillet all round	No	275		
	<p><b><u>Gypsum plasterboard cornices</u></b></p>				
3	50 x 50mm cornice fixed to ceiling/wall with cornice adhesive	m	9 972		
	<b>Carried to Collection</b>				R
	SECTION NO.3 - PHASE 2B-3				
	Bill No. 8				
	Ceilings				
	<b>PHASE 2B</b>				



**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 8

Ceilings

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SECTION NO.3 - PHASE 2B-3

Bill No. 8

Ceilings

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Finishes to ironmongery</u></b></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p>			
	<p><b><u>LOCKS</u></b></p> <p><b><u>"Union" or equal approved</u></b></p>			
1	Two lever mortice lockset with CB furniture	No	814	
2	Three lever mortice lockset with CB furniture	No	547	
	<p><b><u>BATHROOM FITTINGS</u></b></p>			
3	Chromium plated toilet roll holder	No	275	
	<b>Carried to Collection</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 9 Ironmongery <b>PHASE 2B</b>			
				R

Item No		Qty	Rate	Amount
<b><u>"Chairman Industries" or equal approved</u></b>				
4	"Railman" (Code DL2) Stainless steel side wall grab rail with dogleg shape 32mm diameter x 900mm long fixed to wall as per engineers specifications	No	3	
5	"Railman" (Code SR2) Stainless steel side wall straight grab rail 32mm diameter x 750mm long fixed to wall as per engineers specifications	No	3	
6	"Railman" (Code XC) Stainless steel shower corner rail 32mm diameter x 650 x 650 x 90mm overall length fixed to wall as per engineers specifications	No	3	
7	"Railman" (Code XS) Stainless steel fold up shower seat 460 x 480mm long fixed to wall as per engineers specifications	No	3	
<b><u>SUNDRIES</u></b>				
8	Rubber door stop plugged	No	1 372	
<b>Carried to Collection</b>				R
SECTION NO.3 - PHASE 2B-3 Bill No. 9 Ironmongery <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
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Bill No. 9

Ironmongery

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Bill No. 9

Ironmongery

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	<b><u>BILL NO. 10</u></b>	Qty	Rate	Amount
	<b><u>METALWORK</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.			
	<b><u>Descriptions</u></b>			
	Descriptions of bolts shall be deemed to include nuts and washers			
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork of concrete			
	Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	Glazing to aluminum window to be 4mm float glass and obscure glass to W3 top hung sash			
	<b><u>GALVANIZED STEEL BALUSTRADES, ETC</u></b>			
	<b><u>Welded balustrading to staircase</u></b>			
1	Raking balustrading 1264mm high formed of 40 x 40mm square hollow section continuous top and bottom rails filled in with 30 x 30mm square hollow section horizontal rails at 100mm centres and 40 x 40mm square hollow section stanchions at average 1m centres bolted to side of concrete stairs with 2 No. M16 anchor bolts at 500mm centres	m	781	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 10 Metalwork <b>PHASE 2B</b>			
	B 157			

Item No			Qty	Rate	Amount
<b><u>GALVANIZED PRESSED STEEL DOOR FRAMES</u></b>					
<b><u>"Durowin" or equal approved 1mm thick single rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 90mm block walls</u></b>					
2	Frame for door 813 x 2032mm high	No	825		
<b><u>"Durowin" or equal approved 1,2mm thick double rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 140mm block walls</u></b>					
3	Frame for door 813 x 2032mm high	No	547		
<b><u>GALVANIZED STEEL WINDOWS, DOORS, ETC</u></b>					
<b><u>"Durowin" Standard residential windows</u></b>					
4	Window Type NE1 (Code W3), 533 x 654mm high	No	242		
5	Window Type NC1 (Code W4), 533 x 949mm high	No	33		
6	Window Type NC7 (Code W2), 1022 x 949mm high	No	1 334		
7	Window Type ND7 (Code W1), 1022 x 1245mm high	No	308		
8	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 654mm	No	1		Rate only
9	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 949mm	No	1		Rate only
10	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 949mm	No	1		Rate only
11	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 1245mm	No	1		Rate only
<b>Carried to Collection</b>				R	
SECTION NO.3 - PHASE 2B-3 Bill No. 10 Metalwork <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 10

Metalwork

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SECTION NO.3 - PHASE 2B-3

Bill No. 10

Metalwork

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<b><u>Untinted granolithic on concrete</u></b>			
1	25mm Thick on treads and risers of stairs including reedings	m2	1 425	
	<b><u>Untinted granolithic screed with "Sikalite" or equal approved waterproofing admixture on concrete applied in strict accordance with the manufacturers instructions</u></b>			
2	Average 60mm thick on shower floors to falls	m2	223	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster on blockwork and small part on concrete</u></b>			
3	On walls	m2	34 273	
4	On narrow widths	m2	1 631	
	<b><u>Cement plaster with "Sikalite" or equal approved waterproofing admixture on blockwork applied in strict accordance with the manufacturers instructions</u></b>			
5	On walls	m2	4 725	
6	On narrow widths	m2	149	
	<b><u>Cement plaster on concrete</u></b>			
7	On raking soffits of stairs	m2	905	
8	On narrow widths	m2	187	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 11 Plastering <b>PHASE 2B</b>			



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SECTION NO.3 - PHASE 2B-3

Bill No. 11

Plastering

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SECTION NO.3 - PHASE 2B-3

Bill No. 11

Plastering

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

**Item  
No**

**Qty**

**Rate**

**Amount**

**BILL NO. 12**

**PLUMBING AND DRAINAGE**

**SUPPLEMENTARY PREAMBLES**

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.

**High density polyethylene pipes :**

Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips at maximum 500mm centres, with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions

All pipe diameters are nominal external

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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 push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

**Carried to Collection**

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SECTION NO.3 - PHASE 2B-3  
Bill No. 12  
Plumbing & Drainage  
**PHASE 2B**

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>Fixing of pipes</u></b></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><b><u>Reducing fittings</u></b></p> <p>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</p> <p><b><u>Laying, backfilling, bedding, etc. of pipes</u></b></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following:  SANS 1200 L : Medium-pressure pipelines  LD : Sewers  LE : Stormwater drainage  Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200  DB : Earthworks (Pipe trenches)  Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200  LB : Bedding (Pipes).  Unless otherwise described bedding of rigid pipes shall be class B bedding</p>			
<p><b>Carried to Collection</b></p>			R
<p>SECTION NO.3 - PHASE 2B-3  Bill No. 12  Plumbing &amp; Drainage  <b>PHASE 2B</b></p>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>Flush pans</u></b></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><b><u>Stainless steel sinks</u></b></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><b><u>Waste unions</u></b></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><b><u>Sealing around sanitary fittings, etc</u></b></p> <p>Joints around sanitary fittings at junction with walls, etc are to be sealed with an approved silicone sealant and prices shall include for this</p>			
	<p><b><u>STORMWATER DRAINAGE</u></b></p> <p><b><u>Normal duty uPVC pipes</u></b></p>			
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	3 300	
	<p><b><u>Extra over normal duty uPVC pipes for fittings</u></b></p>			
2	110mm Bend	No	550	
3	110mm Access Junction	No	278	
	<b>Carried to Collection</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			
			R	

Item No		Qty	Rate	Amount
	<b><u>Precast Concrete Gulleys</u></b>			
4	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	550	
	<b><u>SOIL DRAINAGE</u></b>			
	<b><u>Normal duty uPVC pipes</u></b>			
5	110mm Pipes laid in and including trenches not exceeding 1m deep	m	3 919	
	<b><u>Extra over normal duty uPVC pipes for fittings</u></b>			
6	110mm Bend	No	1 383	
7	110mm Junction	No	278	
8	110mm Access Junction	No	278	
9	110mm Access reducing junction	No	272	
10	110mm Diameter rodding eye consisting of plain bend at bottom jointed to drain pipe, vertical piping not exceeding 1000mm long including all necessary slow bends, cast iron 'ABC' cover and frame, 150mm thick mass concrete 15MPa/19mm surround all round and including all necessary additional excavation, etc	No	275	
	<b><u>Precast Concrete Gulleys</u></b>			
11	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	514	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>Connection</u></b>			
12	Locating and cutting into side of existing 160mm pipe for and connecting 110mm pipe including inserting 110mm junction	No	275	
	<b><u>Sundries to drainage</u></b>			
13	25mm Diameter hole through 140mm blockwall	No	550	
	<b><u>PLUMBING</u></b>			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>"Marley Vynadeep" or equal approved uPVC</u></b>			
14	125mm Half round eaves gutters with beaded front edge	m	2 390	
15	Extra over eaves gutter for stopped end	No	1 100	
16	Extra over eaves gutter for outlet for 75mm diameter pipe	No	550	
	<b><u>uPVC pipes</u></b>			
17	75mm rainwater pipes	m	3 088	
18	Extra over 75mm rainwater pipe for bend	No	1 100	
19	Extra over 75mm rainwater pipe for shoe	No	550	
	<b><u>SANITARY FITTINGS</u></b>			
	<b><u>Stainless steel sinks</u></b>			
20	Single end bowl sink size 900 x 535mm with chromium plated grating, waste, plug with stirrup, chain and stay, fixed to block wall with and including galvanised gallow brackets (taps, trap elsewhere)	No	275	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

Item No		Qty	Rate	Amount
	<b><u>Glazed ceramic fittings</u></b>			
21	White basin, size 560 x 405mm, with 38mm chromium plated waste union, with one tap hole, anti-theft plug with spindle fixed to wall with and including two 10mm bolts (Taps, traps elsewhere)	No	272	
22	White low-level 90 degree outlet WC suite including matching 4,5 litre low flush cistern and heavy duty white plastic double flap seat	No	272	
	<b><u>"Vaal" or equal approved</u></b>			
23	"Protea Paraplegic" 90° outlet pan (code 750246) and matching 9 litre cistern (code 7116LP) complete with lid, fitments, and purpose-made C.P. side-flush lever (left or right). Bottom inlet water supply must be on same side as flush lever including double flap seat & cover (code 411-65533) (traps, taps elsewhere measured)	No	3	
24	Rounded 510 x 405 x 130mm deep "Hibiscus" basin with one semi-punched tapholes, integrated overflow, and chainstay hole through the centre semi-punched taphole fixed to wall using two 10 mm bolts (code 8448Z0) or as per engineers specifications (waste, taps and traps elsewhere measured)	No	3	
	<b><u>TRAPS, ETC</u></b>			
	<b><u>Flexible rubber</u></b>			
25	50mm Deep seal rubber P-trap	No	550	
	<b><u>Brass</u></b>			
26	50mm Rough brass shower P-trap with CP grating	No	275	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>TAPS, VALVES, ETC</u></b>				
27	15mm Stopcock	No	550		
28	22mm Stopcock	No	547		
	<b><u>"Cobra Watertech" or equal approved</u></b>				
29	15mm "Cobra 111" Star chromium plated pillartap	No	544		
30	15mm "500 Series (Code 503-21b)" Chromium plated elbow action pillartap	No	6		
31	15mm "Cobra 128" Star chromium plated underwall pattern stoptap	No	275		
32	15mm "Cobra 027" Chromium plated overhead shower arm	No	272		
33	15mm "Cobra 068BJ" Chromium plated shower rose	No	272		
34	15mm "TVSH1202/CH" Chromium plated 1 function hand shower including water saving insert and 1500mm chrome flexible hose with wall bracket brass outlet (Code TVSH1397/CH)	No	3		
	<b><u>SANITARY PLUMBING</u></b>				
	<b><u>Soil, waste &amp; vent uPVC pipes</u></b>				
35	50mm Pipes to walls, columns, soffits, etc	m	1 862		
36	110mm Pipes to walls, columns, soffits, etc	m	523		
	<b><u>Extra over uPVC pipes for fittings</u></b>				
37	50mm Access bend	No	1 100		
38	50mm Junction	No	275		
	<b>Carried to Collection</b>				R
	SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
39	110mm x 245mm Long "Wirquin Soupless" flexible fitting	No	275		
40	110mm Access bend	No	275		
41	110mm Access junction	No	275		
42	110mm Pan connector	No	275		
43	110 x 50mm Access reducing junction	No	275		
44	50mm "GI One way" vent valve	No	275		
45	110mm "GI Two way" vent valve	No	275		
<b><u>WATER SUPPLIES</u></b>					
<b><u>HDPE Class 12 rigid high density polyethylene pipes with plastic compression fittings</u></b>					
46	16mm Pipes laid in and including trenches not exceeding 1m deep	m	3 300		
47	16mm Pipes to walls, soffits ,etc	m	4 125		
48	25mm Pipes to walls, soffits ,etc	m	3 567		
49	32mm Pipes to walls, soffits ,etc	m	1 375		
<b><u>Extra over rigid high density polyethylene pipes for plastic compression fittings</u></b>					
50	16mm Fittings	No	3 575		
51	25mm Fittings	No	1 922		
52	32mm Elbow	No	550		
53	32 x 25mm Reducing tee	No	275		
<b>Carried to Collection</b>					R
SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Connection</u></b>			
54	Cutting into existing water supply pipe for and including connection with 16mm pipe including all fittings, etc	No	275	
	<b><u>COLLECT FROM STORES AND FIX ONLY THE FOLLOWING</u></b>			
	<b><u>Collect from eThekweni Municipality Store in Springfield Park, Durban</u></b>			
55	100 Litre water storage tank size approximately 800mm wide x 1000mm long placed in position between roof trusses in roof space	No	275	
	<b><u>TESTING</u></b>			
56	Testing the whole of the water supply and sanitary pipe system including fittings	No	275	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 12

Plumbing & Drainage

**COLLECTION**

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SECTION NO.3 - PHASE 2B-3

Bill No. 12

Plumbing & Drainage

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<b><u>4mm Clear float glass</u></b>			
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	1 293	
2	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	410	
	<b><u>4mm Obscure glass</u></b>			
3	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	85	
	<b><u>MIRRORS</u></b>			
	<b><u>4mm Silvered float glass copper backed mirrors with bevelled edges holed for and fixed to blockwork</u></b>			
4	Mirror 500 x 600mm high	No	3	
	<b>Carried Forward to Summary of Section No. 3</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 13 Glazing <b>PHASE 2B</b>			
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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>SABS Specifications</u></b></p> <p>High gloss enamel paint : SANS 630 Grade I</p> <p>Oil gloss enamel paint : SANS 631</p> <p>Primers for wood for external work : SANS 678 Type I</p> <p>Primers for wood for internal work : SANS 678 Type III</p> <p>Zink chromate primers for steel : SANS 679 Type I</p> <p>Wash primer (metal etch) : SANS 723</p> <p>Varnish for interior use : SANS 887 Type I</p> <p>Emulsion paints : SANS 1586</p>			
	<p><b><u>PAINTWORK, ETC TO NEW WORK</u></b></p> <p><b><u>ON SCREEDED FLOORS</u></b></p> <p><b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b></p>			
1	On granolithic screeded shower floors	m2	223	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON BAGGED BLOCKWORK</u></b>			
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat Stipple Texture PVA emulsion paint</u></b>			
2	On soffit of precast beam and block slab	m2	6 196	
	<b><u>ON FLOATED PLASTER</u></b>			
	<b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b>			
3	On internal shower walls	m2	1 790	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat PVA emulsion paint</u></b>			
4	On internal walls	m2	40 642	
5	On external walls	m2	21 513	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
6	On ceilings and beams	m2	1 089	
	<b><u>ON PLASTER BOARD</u></b>			
	<b><u>One coat primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
7	On ceilings and cornices	m2	6 072	
	<b>Carried to Collection</b>			R
	SECTION NO.3 - PHASE 2B-3			
	Bill No. 14			
	Paintwork			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON FIBRE-CEMENT</u></b>			
	<b><u>One coat primer, one undercoat and two coats pure acrylic emulsion paint</u></b>			
8	On fascias and barge boards	m2	1 710	
	<b><u>ON METAL</u></b>			
	<b><u>One coat calcium plumbate primer</u></b>			
9	On backs of frames not exceeding 300mm girth	m	6 993	
	<b><u>One coat galvanised iron cleaning primer, one coat calcium plumbate primer, one undercoat and one finishing coat polyurethane velvet enamel paint on galvanised steel</u></b>			
10	On door frames	m2	1 986	
11	On windows	m2	3 575	
12	On balustrades (both sides measured over the full flat area)	m2	2 005	
	<b><u>ON WOOD</u></b>			
	<b><u>One coat wood primer, one undercoat and one finishing coat polyurethane velvet enamel paint</u></b>			
13	On doors	m2	2 877	
	<b><u>Two coats exterior quality clear polyurethane varnish</u></b>			
14	On doors	m2	2 118	
	<b>Carried to Collection</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 14 Paintwork <b>PHASE 2B</b>			
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**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>HOUSE NUMBERING</u></b></p> <p><b><u>150mm High by 100mm wide black lettering painted using approved stencils - priced per set of 4 digits per unit</u></b></p>			
15	On painted walls	No	275	
	<b>Carried to Collection</b>			
	SECTION NO.3 - PHASE 2B-3 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 14

Paintwork

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Bill No. 14

Paintwork

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 15</u></b></p> <p><b><u>PROVISIONAL AMOUNTS</u></b></p> <p>The following Provisional Amounts are all NET amounts EXCLUSIVE of commission for the Contractor. These amounts are for work to be executed complete by Nominated/Selected Sub-Contractors.</p> <p>Provisional Amounts may be omitted or reduced at the Employer's sole discretion and the contractor shall not be entitled to claim for any loss by way of reductions or omissions of any discount, or percentage relating to Provisional Amounts or P.C. amounts or any loss of profit related thereto.</p>			
	<p><b><u>ELECTRICAL INSTALLATION</u></b></p>			
1	Allow the provisional amount of R 1 925 000.00 (One Million Nine Hundred and Twenty Five Thousand Rand) for Electrical Installation	Item		1 925 000.00
2	Profit	Item		
3	Attendance	Item		
	<p><b><u>PROFESSIONAL FEES</u></b></p>			
4	Allow the provisional amount of R 1 100 000.00 (One Million One Hundred Thousand Rand) for Structural Element Design, Monitoring and Certification	Item		1 100 000.00
5	Profit	Item		
6	Attendance	Item		
	<b>Carried to Collection</b>			R
	<p>SECTION NO.3 - PHASE 2B-3 Bill No. 15 Provisional Amounts <b>PHASE 2B</b></p>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>ENVIRONMENTAL MONITORING AND REPORTING</u></b>				
7	Allow the provisional amount of R 412 500.00 (Four Hundred and Twelve Thousand Five Hundred Rand) for Environmental Monitoring and Reporting as per the approved Environmental Management Programme (EMPr) to Relevant Statutory Authorities	Item		412 500.00
8	Profit	Item		
9	Attendance	Item		
<b><u>BUDGETARY ALLOWANCES</u></b>				
<b><u>The following Budgetary Allowances are for work to be executed by the Contractor and priced at Bill rates or rates to be agreed</u></b>				
<b><u>BUILDERS WORK IN CONNECTION WITH SPECIALIST INSTALLATIONS</u></b>				
10	Allow the Budgetary Amount of R 100 000.00 (One Hundred Thousand Rand) for builders work in connection with specialist installations	Item		100 000.00
<b>Carried to Collection</b>				R
SECTION NO.3 - PHASE 2B-3 Bill No. 15 Provisional Amounts <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.3 - PHASE 2B-3

Bill No. 15

Provisional Amounts

**COLLECTION**

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SECTION NO.3 - PHASE 2B-3

Bill No. 15

Provisional Amounts

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

**SECTION SUMMARY - SECTION NO.3 - PHASE 2B-3**

<b>Bill No</b>		<b>Page No</b>		<b>Amount</b>
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4	Masonry	139		
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6	Roof Coverings	145		
7	Carpentry & Joinery	150		
8	Ceilings	153		
9	Ironmongery	156		
10	Metalwork	159		
11	Plastering	162		
12	Plumbing & Drainage	172		
13	Glazing	173		
14	Paintwork	178		
15	Provisional Amounts	181		
	SUB-TOTAL		R	
	Add: Contract Skills Development Goals (0,5%)	%		
	<b>Carried to Form of Tender</b>		R	
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	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Amount
	<p><b><u>SECTION NO. 4 - PHASE 2B-4</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES</u></b></p>		
1	<p>Allow for all preliminary costs associated with complying with the JBCC Series (Edition 6.2) May 2018 Principal Building Agreement for <b>Phase 2B-4</b>. Refer to <b>Preliminaries</b> Bill of Quantities for detailed clauses for pricing purposes.</p> <p>F:..... V:..... T:.....</p>	Item	
2	<p><b><u>PENALTY FOR LATE COMPLETION :</u></b></p> <p>Contract Period : <i>14 months (Including Builders Break)</i></p> <p>Penalty amount per Calendar day : <i>R 8 700.00</i></p>	Item	
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 4</b></p>	R	
	<p>SECTION NO.4 - PHASE 2B-4            Bill No. 1            Preliminaries  <b>PHASE 2B</b></p>		

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>EARTHWORKS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Nature of ground</u></b></p> <p>The Tenderer must acquaint himself with the nature of the material to be excavated. Excavation in 'earth' shall be defined as excavation in all types of material.</p> <p><b><u>Subterranean water</u></b></p> <p>No information regarding subterranean water is available. The Tenderer must acquaint himself of the presence and depth of subterranean water and allow for same in his pricing</p> <p><b><u>Carting away of excavated material</u></b></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><b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p>			
1	To remove sloping banks	m3	236	
2	Trenches	m3	1 163	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 2 Earthworks <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>			
3	Soft rock	m3	96	
4	Hard rock	m3	42	
	<b><u>Extra over all excavations for carting away</u></b>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	1 402	
	<b><u>Risk of collapse of excavations</u></b>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	8 031	
	<b><u>Keeping excavations free of water</u></b>			
7	Keeping excavations free of water other than subterranean water		Item	
	<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u></b>			
8	Backfilling to trenches, holes, etc	m3	124	
	<b><u>Earth filling of G5 material in accordance with SABS 1200 DM supplied by the contractor compacted to 95% Mod AASHTO density</u></b>			
9	Backfilling to trenches, holes, etc	m3	138	
	<b><u>Compaction of surfaces</u></b>			
10	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 93% Mod AASHTO density	m2	4 355	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 2 Earthworks <b>PHASE 2B</b>			



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 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 2

Earthworks

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SECTION NO.4 - PHASE 2B-4

Bill No. 2

Earthworks

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p>Formwork to sides of 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"</p>			
1	<p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p> <p>Surface blinding under footings and bases m3</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.4 - PHASE 2B-4 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>	94		R

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
	<b><u>30MPa / 19mm concrete</u></b>			
2	Strip footings	m3	63	
3	Foundation beams to raft slab	m3	924	
4	Raft slab	m3	770	
5	Stairs including landings, beams and inverted beams	m3	204	
	<b><u>TEST BLOCKS</u></b>			
6	Making and testing 150 x 150 x 150mm concrete strength test cube	No	2 789	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a power float finish</u></b>			
7	Raft slabs, etc	m2	5 923	
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
	<b><u>Rough formwork to sides</u></b>			
8	Strip footings not exceeding 300mm high	m	405	
9	Ground beams	m2	1 170	
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	7 034	
11	Sloping and stepped outer edges of stairs 330mm high extreme	m	620	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 3 Concrete, Formwork & Reinforcement <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Rough formwork to soffits</u></b>			
12	Stairs with sloping soffits	m2	770	
	<b><u>MOVEMENT JOINTS, ETC</u></b>			
	<b><u>Two layers 375 micron plastic slip joints between horizontal concrete and brick surfaces including cement mortar bed</u></b>			
13	Not exceeding 300mm wide	m	5 183	
	<b><u>Expansion joints with bitumen impregnated softboard between vertical concrete and block surfaces</u></b>			
14	15mm Joints not exceeding 300mm high	m	873	
	<b><u>Saw cut joints</u></b>			
15	3 x 30mm Saw cut joints in top of concrete	m	517	
	<b><u>REINFORCEMENT</u></b>			
	<b><u>Mild steel reinforcement to structural concrete work</u></b>			
16	Bars of various diameters	t	30.42	
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>			
17	Bars of various diameters	t	237.28	
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	SECTION NO.4 - PHASE 2B-4			
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	Concrete, Formwork & Reinforcement			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>DESIGN, SUPPLY &amp; INSTALL THE FOLLOWING</u></b></p>			
<p>Tenderers are advised that only prefabricated beam and block slab systems will be considered for the first floor slab construction.</p>			
<p>The Tenderer shall ensure that all shop drawings are submitted with their tender for approval by the Principal Agent.</p>			
<p><i>Contractor to indicate here the name of the supplier of the beam and block slab proposed :</i></p> <p>.....</p>			
<p>The design, manufacture, supply and installation of the following items shall be under the control of a registered Engineer in accordance with relevant SANS standards. The tenderer shall be required to lodge a written guarantee/certificate for the designed component of each unit from a qualified registered Structural Engineer with the required capability certificate and professional indemnity cover.</p>			
<p>The design shall comply with all relevant SANS standards as well as the National Home Building Registration Council Manual (NHBRC Manual). These include but are not restricted to :</p>			
<ul style="list-style-type: none"> <li>a) Design of Concrete Elements - SANS 0100:2000 Ed2.2</li> <li>b) Loading Code - SANS 10160:2011</li> <li>c) Construction Methods (National Building Regulations) - SANS 10400</li> </ul>			
<p>Tenderers are to refer to drawings annexured to this document.</p> <p>-----</p>			
<p><b>Carried to Collection</b></p>			
<p>SECTION NO.4 - PHASE 2B-4 Bill No. 3 Concrete, Formwork &amp; Reinforcement <b>PHASE 2B</b></p>			
		R	

Item No	<u>FIRST FLOOR SLAB</u>	Qty	Rate	Amount
	<p><u>Design, supply and install prefabricated beam and block first floor slab complete with pre-stressed reinforced concrete beams, approved blocks laid end to end in rows, concrete topping, mesh and bar reinforcement, temporary propping, expansion joints, powerfloated finish to top and 5mm thick cement bagging finish to soffit, designed for a Imposed Load of not less than 2kN/m2 (As per SANS 10160 Table 1). Slab thickness not to exceed 200mm overall</u></p>			
18	<p>First floor slab on 7MPa loadbearing blockwork size 6250 x 4070mm overall on plan and 2,4m above bearing level including 1025 x 2900mm opening for staircase with beams/lintols spanning a length of 6250mm (Unit Type A) (Blockwork and staircase elsewhere measured)</p>	No	204	
19	<p>First floor slab on 7MPa loadbearing blockwork size 6140 x 4272mm overall on plan and 2,4m above bearing level including L-shaped opening for staircase 4150mm girth x 900mm wide, with beams/lintols spanning a length of 6140mm (Unit Type B) (Blockwork and staircase elsewhere measured)</p>	No	28	
<b>Carried to Collection</b>			R	
<p>SECTION NO.4 - PHASE 2B-4                  Bill No. 3                  Concrete, Formwork &amp; Reinforcement  <b>PHASE 2B</b></p>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 3

Concrete, Formwork & Reinforcement

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SECTION NO.4 - PHASE 2B-4

Bill No. 3

Concrete, Formwork & Reinforcement

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>BLOCKWORK</u></b></p> <p><b><u>Blockwork</u></b></p> <p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction".</p> <p>Blocks shall comply with SANS 1215 and shall bear the SANS mark.</p> <p>All blocks must be saw cut and not broken with a trowel and prices must include for this.</p> <p>All M150 blocks are to have a minimum compressive strength of 7 MPa.</p> <p>Descriptions of blockwork shall be deemed to include for wedging and pinning against columns, beams, slabs, etc.</p> <p>Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Surfaces to receive bagging shall have flush joints.</p>			
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 4 Masonry <b>PHASE 2B</b>			

Item No		Qty	Rate	Amount
	<b><u>SAMPLES</u></b>			
	Samples of all masonry building units, except those for walls described as "load 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 to site.			
	<b><u>FOUNDATIONS</u></b>			
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in class I cement mortar</u></b>			
1	140mm Walls in M150 blocks	m2	491	
	<b><u>SUPERSTRUCTURE</u></b>			
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 3,5MPa concrete masonry blocks in Class II cement mortar</u></b>			
2	90mm Walls in M100 blocks	m2	5 576	
3	90mm Shower kerb one course high in M100 blocks	m	241	
	<b><u>Blockwork in "Corobrik Corocrete Coroblok" or equal approved 7MPa concrete masonry blocks in Class I cement mortar</u></b>			
4	140mm Walls in M150 blocks	m2	19 855	
5	140mm Walls in M150 blocks in beamfilling	m2	400	
6	140mm Walls in M150 blocks above wall plate level	m2	1 547	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4			
	Bill No. 4			
	Masonry			
	<b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BLOCKWORK SUNDRIES</u></b>			
	<b><u>10MPa/19mm Mass concrete filling to cavity of blockwork</u></b>			
7	Mass concrete filling	m3	30	
	<b><u>Galvanised blockwork reinforcement</u></b>			
8	75mm Wide reinforcement built in horizontally	m	73 406	
	<b><u>"Fabcon" or equal approved pre-stressed fabricated lintels</u></b>			
9	90 x 110mm Lintels in lengths not exceeding 3m	m	913	
10	140 x 110mm Lintels in lengths not exceeding 3m	m	2 813	
	<b><u>Galvanised hoop iron cramps, ties, etc</u></b>			
11	30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into blockwork	No	3 463	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 4 Masonry <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 4

Masonry

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SECTION NO.4 - PHASE 2B-4

Bill No. 4

Masonry

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>BILL NO. 5</u></b>				
<b><u>WATERPROOFING</u></b>				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.				
<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
<b><u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or equal approved embossed damp proof course</u></b>				
1	In walls	m2	831	
2	In walls under window cills	m2	232	
<b><u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or equal approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></b>				
3	Under raft slabs	m2	4 514	
4	Sides of ground beams	m2	6 732	
<b><u>PROTECTION TO WATERPROOFING</u></b>				
<b><u>10mm Softboard protection</u></b>				
5	Vertically behind ground beams	m2	676	
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 5 Waterproofing <b>PHASE 2B</b>				



**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 5

Waterproofing

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SECTION NO.4 - PHASE 2B-4

Bill No. 5

Waterproofing

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b>BILL NO. 6</b></p> <p><b><u>ROOF COVERINGS, ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p>			
	<p><b><u>TILES</u></b></p> <p><b><u>420 x 332mm "Marley" or equal approved Double Roman through colour (Slate Grey) concrete roof tiles fixed with suitable non-corrosive storm clips as required nailed through underlay to and including 38 x 38mm sawn softwood battens at 320mm centres</u></b></p>			
1	Roof covering with pitch not exceeding 25 degrees	m2	8 265	
2	Ridge tiles to match roofing tiles including soaker underlay, additional battens, etc and bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	1 081	
3	Verge capping tiles to match roofing tiles including soaker underlay, additional battens, etc bedded and pointed in 1:3 cement mortar tinted to match tile colour	m	1 788	
4	Ridge end tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour	No	218	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 6 Roof Coverings <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
5	<p><b><u>"Monier Easyflash" or equal approved 1,4mm thick aluminium composite waterproofing membrane with butyl self adhesive fixed in strict accordance to the manufacturer's instructions</u></b></p> <p>Stepped side wall flashing</p>	m	480	
<b><u>UNDERTILE MEMBRANE</u></b>				
6	<p><b><u>"Marley Econo" or equal approved residential application undertile membrane fixed in strict accordance with the manufacturer's instructions</u></b></p> <p>Undertile membrane laid taut over rafters (at approximately 690mm centres) and fixed concurrent with tilting battens, purlins, etc</p>	m2	6 421	
<b>Carried to Collection</b>				R
<p>SECTION NO.4 - PHASE 2B-4          Bill No. 6          Roof Coverings  <b>PHASE 2B</b></p>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 6

Roof Coverings

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SECTION NO.4 - PHASE 2B-4

Bill No. 6

Roof Coverings

**PHASE 2B**

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No	Qty	Rate	Amount
<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p><b><u>ROOFS, ETC</u></b></p> <p>The design, manufacture and transportation of the roof trusses, bracing, etc shall be under the control of a registered Engineer in accordance with SANS 1900, SANS 10166 and SANS 100163. It shall be required from the manufacturer of the trusses to lodge a written guarantee that his construction has been designed by a qualified Structural Engineer and that he is in possession of a capability certificate issued by the Institute for Timber Construction and approved by the Engineer.</p> <p>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.</p>			
<p style="text-align: right;"><b>Carried to Collection</b></p> <p>SECTION NO.4 - PHASE 2B-4            Bill No. 7            Carpentry &amp; Joinery  <b>PHASE 2B</b></p>		R	

Item No	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 and permanent bracing	Qty	Rate	Amount
	<p><b><u>Prefabricated plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 690mm centres. Roof Covering is concrete roof tiles on timber battens. Ceilings are 6,4mm plasterboard ceilings. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences.</p> <p><b><u>Sawn softwood trusses</u></b></p>			
1	Double pitched roof truss 3992mm span x 850mm high with 740mm eaves overhang projection both sides	No	56	
2	Double pitched roof truss 4132mm span x 850mm high with 600mm eaves overhang projection one side and 740mm other side	No	112	
3	Double pitched roof truss 4272mm span x 850mm high with 600mm eaves overhang projection both sides	No	112	
4	Double pitched roof truss 6036mm span x 1200mm high with 740mm eaves overhang projection both sides	No	405	
5	Double pitched roof truss 6316mm span x 1200mm high with 600mm eaves overhang projection both sides	No	1 016	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 7 Carpentry & Joinery <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
6	Double pitched roof truss 6884mm span x 1350mm high with 740mm eaves overhang projection both sides	No	16	
7	Double pitched roof truss 7024mm span x 1350mm high with 600mm eaves projection one side and 740mm other side	No	2	
8	Double pitched roof truss 7164mm span x 1350mm high with 600mm eaves overhang projection both sides	No	12	
<b><u>Sawn softwood</u></b>				
9	38 x 76mm Wall plates	m	1 970	
<b><u>Sundries</u></b>				
10	Two coats creosote on sawn timbers	m2	665	
<b><u>EAVES, VERGES ETC</u></b>				
<b><u>Fibre-cement fascia and barge boards</u></b>				
11	10mm x 225mm Fibre cement fascia board fixed to truss and joined with PVC joiner	m	2 033	
12	8mm x 200 x 80mm Barge board with PVC joiners fixed to brandering	m	1 821	
<b><u>DOORS, ETC</u></b>				
<b><u>Hollow core flush doors with commercial veneer on both sides suitable for painting hung to steel frames</u></b>				
13	40mm Door, 813 x 2032mm high	No	702	
<b><u>Wrot meranti doors hung to steel frames</u></b>				
14	44mm Framed, ledged and braced batten door 813 x 2032mm high filled in with 22mm V-jointed boarding both sides	No	466	
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 7 Carpentry & Joinery <b>PHASE 2B</b>				

Item No		Qty	Rate	Amount
<b><u>SUPPORT FOR WATER STORAGE TANK</u></b>				
<b><u>S.A Pine</u></b>				
15	38 x 114mm Bearers bolted	m	702	
<b><u>Shutterboard</u></b>				
16	18mm Thick boarding	m2	234	
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 7 Carpentry & Joinery <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 7

Carpentry & Joinery

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SECTION NO.4 - PHASE 2B-4

Bill No. 7

Carpentry & Joinery

**PHASE 2B**

Item No		Unit	Qty	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>CEILINGS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></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 elsewhere</p>				
	<p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>6,4mm Gypsum plasterboard with taped and skimmed joints</u></b></p>				
1	Ceilings including 38 x 38mm SA Pine brandering at 400mm centres	m2	5 167		
2	Extra over ceiling and brandering for 650 x 650mm trap door of 38 x 38mm wrot softwood rebated framing with 38 x 114mm sawn softwood trimmers covered with ceiling board and fitted flush in opening with 19 x 50mm wrot softwood fillet all round	No	234		
	<p><b><u>Gypsum plasterboard cornices</u></b></p>				
3	50 x 50mm cornice fixed to ceiling/wall with cornice adhesive	m	8 485		
	<b>Carried to Collection</b>				R
	SECTION NO.4 - PHASE 2B-4				
	Bill No. 8				
	Ceilings				
	<b>PHASE 2B</b>				



**CONTRACT NO.1H-32115  
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SECTION NO.4 - PHASE 2B-4

Bill No. 8

Ceilings

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SECTION NO.4 - PHASE 2B-4

Bill No. 8

Ceilings

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Finishes to ironmongery</u></b></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p>			
	<p><b><u>LOCKS</u></b></p> <p><b><u>"Union" or equal approved</u></b></p>			
1	Two lever mortice lockset with CB furniture	No	693	
2	Three lever mortice lockset with CB furniture	No	466	
	<p><b><u>BATHROOM FITTINGS</u></b></p>			
3	Chromium plated toilet roll holder	No	234	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 9 Ironmongery <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115**

**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>"Chairman Industries" or equal approved</u></b>				
4	"Railman" (Code DL2) Stainless steel side wall grab rail with dogleg shape 32mm diameter x 900mm long fixed to wall as per engineers specifications	No	2	
5	"Railman" (Code SR2) Stainless steel side wall straight grab rail 32mm diameter x 750mm long fixed to wall as per engineers specifications	No	2	
6	"Railman" (Code XC) Stainless steel shower corner rail 32mm diameter x 650 x 650 x 90mm overall length fixed to wall as per engineers specifications	No	2	
7	"Railman" (Code XS) Stainless steel fold up shower seat 460 x 480mm long fixed to wall as per engineers specifications	No	2	
<b><u>SUNDRIES</u></b>				
8	Rubber door stop plugged	No	1 168	
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 9 Ironmongery <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 9

Ironmongery

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SECTION NO.4 - PHASE 2B-4

Bill No. 9

Ironmongery

**PHASE 2B**

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>Descriptions</u></b></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 of concrete</p> <p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Glazing to aluminum window to be 4mm float glass and obscure glass to W3 top hung sash</p>			
	<p><b><u>GALVANIZED STEEL BALUSTRADES, ETC</u></b></p> <p><b><u>Welded balustrading to staircase</u></b></p>			
1	<p>Raking balustrading 1264mm high formed of 40 x 40mm square hollow section continuous top and bottom rails filled in with 30 x 30mm square hollow section horizontal rails at 100mm centres and 40 x 40mm square hollow section stanchions at average 1m centres bolted to side of concrete stairs with 2 No. M16 anchor bolts at 500mm centres</p>	m	665	
	<p><b>Carried to Collection</b></p>			R
	<p>SECTION NO.4 - PHASE 2B-4            Bill No. 10            Metalwork  <b>PHASE 2B</b></p>			
	<p>B 215</p>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
<b><u>GALVANIZED PRESSED STEEL DOOR FRAMES</u></b>				
<b><u>"Durowin" or equal approved 1mm thick single rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 90mm block walls</u></b>				
2	Frame for door 813 x 2032mm high	No	702	
<b><u>"Durowin" or equal approved 1,2mm thick double rebated frames with adjustable striking plate including pair of steel hinges per door leaf, rubber buffers to the lock jambs and fixing lugs welded on, suitable for 140mm block walls</u></b>				
3	Frame for door 813 x 2032mm high	No	466	
<b><u>GALVANIZED STEEL WINDOWS, DOORS, ETC</u></b>				
<b><u>"Durowin" Standard residential windows</u></b>				
4	Window Type NE1 (Code W3), 533 x 654mm high	No	206	
5	Window Type NC1 (Code W4), 533 x 949mm high	No	28	
6	Window Type NC7 (Code W2), 1022 x 949mm high	No	1 135	
7	Window Type ND7 (Code W1), 1022 x 1245mm high	No	262	
8	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 654mm	No	1	Rate only
9	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 533 x 949mm	No	1	Rate only
10	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 949mm	No	1	Rate only
11	Aluminium 30.5 casement (Class1) 25 micron natural anodized complete, 1022 x 1245mm	No	1	Rate only
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 10 Metalwork <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 10

Metalwork

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Bill No. 10

Metalwork

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<b><u>Untinted granolithic on concrete</u></b>			
1	25mm Thick on treads and risers of stairs including reedings	m2	1 212	
	<b><u>Untinted granolithic screed with "Sikalite" or equal approved waterproofing admixture on concrete applied in strict accordance with the manufacturers instructions</u></b>			
2	Average 60mm thick on shower floors to falls	m2	190	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster on blockwork and small part on concrete</u></b>			
3	On walls	m2	29 163	
4	On narrow widths	m2	1 388	
	<b><u>Cement plaster with "Sikalite" or equal approved waterproofing admixture on blockwork applied in strict accordance with the manufacturers instructions</u></b>			
5	On walls	m2	4 020	
6	On narrow widths	m2	126	
	<b><u>Cement plaster on concrete</u></b>			
7	On raking soffits of stairs	m2	770	
8	On narrow widths	m2	159	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 11 Plastering <b>PHASE 2B</b>			



**CONTRACT NO.1H-32115  
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SECTION NO.4 - PHASE 2B-4

Bill No. 11

Plastering

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SECTION NO.4 - PHASE 2B-4

Bill No. 11

Plastering

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING AND DRAINAGE</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect, prior to submission of Tenders.</p> <p><b><u>High density polyethylene pipes :</u></b></p> <p>Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips at maximum 500mm centres, with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><b><u>uPVC pipes and fittings:</u></b></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><b><u>uPVC pressure pipes and fittings:</u></b></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing &amp; Drainage <b>PHASE 2B</b></p>			
			R	

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>Fixing of pipes</u></b></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><b><u>Reducing fittings</u></b></p> <p>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</p> <p><b><u>Laying, backfilling, bedding, etc. of pipes</u></b></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following:  SANS 1200 L : Medium-pressure pipelines  LD : Sewers  LE : Stormwater drainage  Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200  DB : Earthworks (Pipe trenches)  Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200  LB : Bedding (Pipes).  Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.4 - PHASE 2B-4  Bill No. 12  Plumbing &amp; Drainage  <b>PHASE 2B</b></p>			
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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>Flush pans</u></b></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><b><u>Stainless steel sinks</u></b></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><b><u>Waste unions</u></b></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><b><u>Sealing around sanitary fittings, etc</u></b></p> <p>Joints around sanitary fittings at junction with walls, etc are to be sealed with an approved silicone sealant and prices shall include for this</p>			
	<p><b><u>STORMWATER DRAINAGE</u></b></p> <p><b><u>Normal duty uPVC pipes</u></b></p>			
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	2 808	
	<p><b><u>Extra over normal duty uPVC pipes for fittings</u></b></p>			
2	110mm Bend	No	468	
3	110mm Access Junction	No	236	
	<b>Carried to Collection</b>			
	SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

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Item No		Qty	Rate	Amount
<b><u>Precast Concrete Gulleys</u></b>				
4	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	468	
<b><u>SOIL DRAINAGE</u></b>				
<b><u>Normal duty uPVC pipes</u></b>				
5	110mm Pipes laid in and including trenches not exceeding 1m deep	m	3 335	
<b><u>Extra over normal duty uPVC pipes for fittings</u></b>				
6	110mm Bend	No	1 177	
7	110mm Junction	No	236	
8	110mm Access Junction	No	236	
9	110mm Access reducing junction	No	232	
10	110mm Diameter rodding eye consisting of plain bend at bottom jointed to drain pipe, vertical piping not exceeding 1000mm long including all necessary slow bends, cast iron 'ABC' cover and frame, 150mm thick mass concrete 15MPa/19mm surround all round and including all necessary additional excavation, etc	No	234	
<b><u>Precast Concrete Gulleys</u></b>				
11	Precast concrete gulley with 160mm diameter uPVC gulley trap with 110mm diameter outlet and joint to uPVC drain pipe including PVC grating	No	438	
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>				

<b>Item No</b>		<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>Connection</u></b>			
12	Locating and cutting into side of existing 160mm pipe for and connecting 110mm pipe including inserting 110mm junction	No	234	
	<b><u>Sundries to drainage</u></b>			
13	25mm Diameter hole through 140mm blockwall	No	468	
	<b><u>PLUMBING</u></b>			
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>"Marley Vynadeep" or equal approved uPVC</u></b>			
14	125mm Half round eaves gutters with beaded front edge	m	2 033	
15	Extra over eaves gutter for stopped end	No	936	
16	Extra over eaves gutter for outlet for 75mm diameter pipe	No	468	
	<b><u>uPVC pipes</u></b>			
17	75mm rainwater pipes	m	2 628	
18	Extra over 75mm rainwater pipe for bend	No	936	
19	Extra over 75mm rainwater pipe for shoe	No	468	
	<b><u>SANITARY FITTINGS</u></b>			
	<b><u>Stainless steel sinks</u></b>			
20	Single end bowl sink size 900 x 535mm with chromium plated grating, waste, plug with stirrup, chain and stay, fixed to block wall with and including galvanised gallow brackets (taps, trap elsewhere)	No	234	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

Item No		Qty	Rate	Amount
	<b><u>Glazed ceramic fittings</u></b>			
21	White basin, size 560 x 405mm, with 38mm chromium plated waste union, with one tap hole, anti-theft plug with spindle fixed to wall with and including two 10mm bolts (Taps, traps elsewhere)	No	232	
22	White low-level 90 degree outlet WC suite including matching 4,5 litre low flush cistern and heavy duty white plastic double flap seat	No	232	
	<b><u>"Vaal" or equal approved</u></b>			
23	"Protea Paraplegic" 90° outlet pan (code 750246) and matching 9 litre cistern (code 7116LP) complete with lid, fitments, and purpose-made C.P. side-flush lever (left or right). Bottom inlet water supply must be on same side as flush lever including double flap seat & cover (code 411-65533) (traps, taps elsewhere measured)	No	2	
24	Rounded 510 x 405 x 130mm deep "Hibiscus" basin with one semi-punched tapholes, integrated overflow, and chainstay hole through the centre semi-punched taphole fixed to wall using two 10 mm bolts (code 8448Z0) or as per engineers specifications (waste, taps and traps elsewhere measured)	No	2	
	<b><u>TRAPS, ETC</u></b>			
	<b><u>Flexible rubber</u></b>			
25	50mm Deep seal rubber P-trap	No	468	
	<b><u>Brass</u></b>			
26	50mm Rough brass shower P-trap with CP grating	No	234	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
	<b><u>TAPS, VALVES, ETC</u></b>				
27	15mm Stopcock	No	468		
28	22mm Stopcock	No	466		
	<b><u>"Cobra Watertech" or equal approved</u></b>				
29	15mm "Cobra 111" Star chromium plated pillartap	No	464		
30	15mm "500 Series (Code 503-21b)" Chromium plated elbow action pillartap	No	4		
31	15mm "Cobra 128" Star chromium plated underwall pattern stoptap	No	234		
32	15mm "Cobra 027" Chromium plated overhead shower arm	No	232		
33	15mm "Cobra 068BJ" Chromium plated shower rose	No	232		
34	15mm "TVSH1202/CH" Chromium plated 1 function hand shower including water saving insert and 1500mm chrome flexible hose with wall bracket brass outlet (Code TVSH1397/CH)	No	2		
	<b><u>SANITARY PLUMBING</u></b>				
	<b><u>Soil, waste &amp; vent uPVC pipes</u></b>				
35	50mm Pipes to walls, columns, soffits, etc	m	1 584		
36	110mm Pipes to walls, columns, soffits, etc	m	445		
	<b><u>Extra over uPVC pipes for fittings</u></b>				
37	50mm Access bend	No	936		
38	50mm Junction	No	234		
	<b>Carried to Collection</b>				R
	SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>				

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**CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

<b>Item No</b>			<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
39	110mm x 245mm Long "Wirquin Soupless" flexible fitting	No	234		
40	110mm Access bend	No	234		
41	110mm Access junction	No	234		
42	110mm Pan connector	No	234		
43	110 x 50mm Access reducing junction	No	234		
44	50mm "GI One way" vent valve	No	234		
45	110mm "GI Two way" vent valve	No	234		
<b><u>WATER SUPPLIES</u></b>					
<b><u>HDPE Class 12 rigid high density polyethylene pipes with plastic compression fittings</u></b>					
46	16mm Pipes laid in and including trenches not exceeding 1m deep	m	2 808		
47	16mm Pipes to walls, soffits ,etc	m	3 510		
48	25mm Pipes to walls, soffits ,etc	m	3 035		
49	32mm Pipes to walls, soffits ,etc	m	1 170		
<b><u>Extra over rigid high density polyethylene pipes for plastic compression fittings</u></b>					
50	16mm Fittings	No	3 042		
51	25mm Fittings	No	1 636		
52	32mm Elbow	No	468		
53	32 x 25mm Reducing tee	No	234		
<b>Carried to Collection</b>					R
SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>					

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>Connection</u></b>			
54	Cutting into existing water supply pipe for and including connection with 16mm pipe including all fittings, etc	No	234	
	<b><u>COLLECT FROM STORES AND FIX ONLY THE FOLLOWING</u></b>			
	<b><u>Collect from eThekweni Municipality Store in Springfield Park, Durban</u></b>			
55	100 Litre water storage tank size approximately 800mm wide x 1000mm long placed in position between roof trusses in roof space	No	234	
	<b><u>TESTING</u></b>			
56	Testing the whole of the water supply and sanitary pipe system including fittings	No	234	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 12 Plumbing & Drainage <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 12

Plumbing & Drainage

**COLLECTION**

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SECTION NO.4 - PHASE 2B-4

Bill No. 12

Plumbing & Drainage

**PHASE 2B**

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<b><u>4mm Clear float glass</u></b>			
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	1 100	
2	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	349	
	<b><u>4mm Obscure glass</u></b>			
3	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	73	
	<b><u>MIRRORS</u></b>			
	<b><u>4mm Silvered float glass copper backed mirrors with bevelled edges holed for and fixed to blockwork</u></b>			
4	Mirror 500 x 600mm high	No	2	
	<b>Carried Forward to Summary of Section No. 4</b>			
	SECTION NO.4 - PHASE 2B-4 Bill No. 13 Glazing <b>PHASE 2B</b>			
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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>SABS Specifications</u></b></p> <p>High gloss enamel paint : SANS 630 Grade I</p> <p>Oil gloss enamel paint : SANS 631</p> <p>Primers for wood for external work : SANS 678 Type I</p> <p>Primers for wood for internal work : SANS 678 Type III</p> <p>Zink chromate primers for steel : SANS 679 Type I</p> <p>Wash primer (metal etch) : SANS 723</p> <p>Varnish for interior use : SANS 887 Type I</p> <p>Emulsion paints : SANS 1586</p>			
	<p><b><u>PAINTWORK, ETC TO NEW WORK</u></b></p> <p><b><u>ON SCREEDED FLOORS</u></b></p> <p><b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b></p>			
1	On granolithic screeded shower floors	m2	190	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON BAGGED BLOCKWORK</u></b>			
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat Stipple Texture PVA emulsion paint</u></b>			
2	On soffit of precast beam and block slab	m2	5 272	
	<b><u>ON FLOATED PLASTER</u></b>			
	<b><u>Apply one coat primer and two coats "Flowcrete Flowseal EPW" or equal approved pigmented water based epoxy resin coating applied in strict accordance with the manufacturers instructions</u></b>			
3	On internal shower walls	m2	1 523	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat PVA emulsion paint</u></b>			
4	On internal walls	m2	34 583	
5	On external walls	m2	18 306	
	<b><u>One coat alkali resistant primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
6	On ceilings and beams	m2	927	
	<b><u>ON PLASTER BOARD</u></b>			
	<b><u>One coat primer, one undercoat and one finishing coat acrylic co-polymer emulsion paint</u></b>			
	On ceilings and cornices	m2	5 167	
	<b>Carried to Collection</b>			
	SECTION NO.4 - PHASE 2B-4			
	Bill No. 14			
	Paintwork			
	<b>PHASE 2B</b>			
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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<b><u>ON FIBRE-CEMENT</u></b>			
	<b><u>One coat primer, one undercoat and two coats pure acrylic emulsion paint</u></b>			
7	On fascias and barge boards	m2	1 455	
	<b><u>ON METAL</u></b>			
	<b><u>One coat calcium plumbate primer</u></b>			
8	On backs of frames not exceeding 300mm girth	m	5 951	
	<b><u>One coat galvanised iron cleaning primer, one coat calcium plumbate primer, one undercoat and one finishing coat polyurethane velvet enamel paint on galvanised steel</u></b>			
9	On door frames	m2	1 689	
10	On windows	m2	3 042	
11	On balustrades (both sides measured over the full flat area)	m2	1 706	
	<b><u>ON WOOD</u></b>			
	<b><u>One coat wood primer, one undercoat and one finishing coat polyurethane velvet enamel paint</u></b>			
12	On doors	m2	2 448	
	<b><u>Two coats exterior quality clear polyurethane varnish</u></b>			
13	On doors	m2	1 802	
	<b>Carried to Collection</b>			R
	SECTION NO.4 - PHASE 2B-4 Bill No. 14 Paintwork <b>PHASE 2B</b>			

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>HOUSE NUMBERING</u></b></p> <p><b><u>150mm High by 100mm wide black lettering painted using approved stencils - priced per set of 4 digits per unit</u></b></p>			
14	On painted walls	No	234	
	<p style="text-align: center;"><b>Carried to Collection</b></p> <p>SECTION NO.4 - PHASE 2B-4            Bill No. 14            Paintwork  <b>PHASE 2B</b></p>		R	

**CONTRACT NO.1H-32115  
 CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 14

Paintwork

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Bill No. 14

Paintwork

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**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

Item No		Qty	Rate	Amount
	<p><b><u>BILL NO. 15</u></b></p> <p><b><u>PROVISIONAL AMOUNTS</u></b></p> <p>The following Provisional Amounts are all NET amounts EXCLUSIVE of commission for the Contractor. These amounts are for work to be executed complete by Nominated/Selected Sub-Contractors.</p> <p>Provisional Amounts may be omitted or reduced at the Employer's sole discretion and the contractor shall not be entitled to claim for any loss by way of reductions or omissions of any discount, or percentage relating to Provisional Amounts or P.C. amounts or any loss of profit related thereto.</p>			
	<p><b><u>ELECTRICAL INSTALLATION</u></b></p>			
1	Allow the provisional amount of R 1 638 000.00 (One Million Six Hundred and Thirty Eight Thousand Rand) for Electrical Installation	Item		1 638 000.00
2	Profit	Item		
3	Attendance	Item		
	<p><b><u>PROFESSIONAL FEES</u></b></p>			
4	Allow the provisional amount of R 936 000.00 (Nine Hundred and Thirty Six Thousand Rand) for Structural Element Design, Monitoring and Certification	Item		936 000.00
5	Profit	Item		
6	Attendance	Item		
	<b>Carried to Collection</b>		R	
	<p>SECTION NO.4 - PHASE 2B-4 Bill No. 15 Provisional Amounts <b>PHASE 2B</b></p>			

Item No		Qty	Rate	Amount
<b><u>ENVIRONMENTAL MONITORING AND REPORTING</u></b>				
7	Allow the provisional amount of R 351 000.00 (Three Hundred and Fifty One Thousand Rand) for Environmental Monitoring and Reporting as per the approved Environmental Management Programme (EMPr) to Relevant Statutory Authorities	Item		351 000.00
8	Profit	Item		
9	Attendance	Item		
<b><u>BUDGETARY ALLOWANCES</u></b>				
<b><u>The following Budgetary Allowances are for work to be executed by the Contractor and priced at Bill rates or rates to be agreed</u></b>				
<b><u>BUILDERS WORK IN CONNECTION WITH SPECIALIST INSTALLATIONS</u></b>				
10	Allow the Budgetary Amount of R 100 000.00 (One Hundred Thousand Rand) for builders work in connection with specialist installations	Item		100 000.00
<b>Carried to Collection</b>				R
SECTION NO.4 - PHASE 2B-4 Bill No. 15 Provisional Amounts <b>PHASE 2B</b>				

**CONTRACT NO.1H-32115  
CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

SECTION NO.4 - PHASE 2B-4

Bill No. 15

Provisional Amounts

**COLLECTION**

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SECTION NO.4 - PHASE 2B-4

Bill No. 15

Provisional Amounts

**PHASE 2B**

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CORNUBIA INTEGRATED HUMAN SETTLEMENT DEVELOPMEN**

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7	Carpentry & Joinery	208		
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9	Ironmongery	214		
10	Metalwork	217		
11	Plastering	220		
12	Plumbing & Drainage	230		
13	Glazing	231		
14	Paintwork	236		
15	Provisional Amounts	239		
	SUB-TOTAL		R	
	Add: Contract Skills Development Goals (0,5%)	%		
	<b>Carried to Form of Tender</b>		R	
	<b>SECTION NO.4 - PHASE 2B-4 PHASE 2B</b>			

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