Item No		Quantity	Rate	Amount
	SECTION 1: PRELIMINARY & GENERAL			
	FIXED CHARGED ITEMS			
1	Site Establishment		SUM	
2	Insurance, including political riot insurance		SUM	
	Establish facilities on site			
	1) For the Engineer			
3	a) Furnished office		SUM	
4	b) Cellphone	Item		15 000.00
5	c) Name board No	1		
6	d) Provision of 1 Desktop, 1Laptop and a 3 in 1 Printer	Item		25 000.00
7	e) Accommodation for Site Engineer	Item		40 000.00
8	Percentage mark-up on item 1b,1d & 1e		%	
	2) For the Contractor			
9	a) Offices, workshop, store, water and electricity arrangement etc.		SUM	
10	b) Other fixed-charge obligations		SUM	
11	Compilation of a health and safety plan		SUM	
12	Provision of HEALTH & SAFETY training, medical examination for workers and administrative work to implement and maintained the safety plan.		SUM	
13	Provision of health and safety equipment and protective clothing for the workforce and 12 additional sets for visitors		SUM	
	Carried Forward  Section No. 1  Bill No. 1  PRELIMINARY & GENERAL  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate		R	

	Brought Forward			R	
14	Provide a provisional amount for control testing by an independent laboratory for trench compaction and concrete strength control for all the tests required during the construction period			SUM	
15	Removal of site establishment			SUM	
	3)Remuneration of the Project Liaison Committee				
16	a) Project Liasion Committee			SUM	
	TIME RELATED ITEMS				
17	Contractual requirements			SUM	
18	Operation and maintenance facilities on site	Month	10		
	1) For the Engineer				
19	a) Office	Month	10		
20	b) Cellphone - (Month/PVSum)	Month	10		
21	c) Survey assistant and equipment	Month	10		
22	d) Provision of 1 Desktop, 1Laptop and a 3in1Printer - (Month/PVSum)	Month	10		
23	Percentage mark-up on item 1b and 1d - <b>10%</b> - <b>Monthly Mark-up</b>			%	
	2) For the Contractor				
24	a) Supervision	Month	10		
25	b) Other time related obligations	Month	10		
26	c) Maintenance of the Health & Safety Plan	Month	10		
27	d) Replacing protective clothing during the contract	Month	10		
28	e) Appointment of safety personal for the contract	Month	10		
	Section No. 1 Bill No. 1 PRELIMINARY & GENERAL Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Section No. 1

Bill No. 1

	Brought Forward		R	
29	f) Provisional cost for safety officer Month	10		
				_
	Carried to Final Summary Section No. 1		R	_
	Bill No. 1 PRELIMINARY & GENERAL			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			
	otago o - Liomontai Lamiate			

Item No		Quantity	Rate	Amount
-	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.1 - EARTHWORKS (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The tenderer acquaint himself by personal examination of the nature of the ground.  Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.			
	Carting away of excavated material			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site			
	Excavation			
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. "Soft rock" and "hard rock" shall be as defined in "Earthworks"			
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill			
	EXCAVATIONS			
	Excavations in earth not exceeding 2m deep			
1	Foundations	m3 137.97		
	Carried Forward Section No. 2		R	
	Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward		- 1	R	
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	75.95		
	Keeping excavations free of water				
3	Keeping excavations free of water other than subterranean water (Proven Method and Expenditure)		Item		
	FILLING				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
4	Backfilling to strip footings, bases etc	m3	62.02		
	Compaction of surfaces				
5	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	375.85		
	Prescribed density tests on filling				
6	"Modified AASTHO Density" test	No	7.52		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
7	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	340.63		
8	To bottoms and sides of trenches etc	m2	535.00		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

		Quantity	Rate	Amount	
SECTION 2 : BLOCK 1 ADMIN					
BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
SUPPLEMENTARY PREAMBLES					
Cost of test					
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)					
<u>Formwork</u>					
Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
25Mpa/19mm Concrete					
Strip footings and Column Bases	m3	26.61			
Surface beds on waterproofing	m3	26.09			
Columns	m3	0.15			
Apron	m3	9.08			
Roof Beam	m3	6.00			
Carried Forward  Section No. 2  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases  Surface beds on waterproofing  Columns  Apron  Roof Beam  Carried Forward  Section No. 2  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases m3  Surface beds on waterproofing m3  Columns m3  Apron m3  Roof Beam m3  Carried Forward  Section No. 2  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases m3 26.61  Surface beds on waterproofing m3 26.09  Columns m3 0.15  Apron m3 9.08  Roof Beam m3 6.00  Carried Forward  Section No. 2  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT SUPPLEMENTARY PREAMBLES Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases m3 26.61  Surface beds on waterproofing m3 26.09  Columns m3 0.15  Apron m3 9.08  Roof Beam m3 6.00  Carried Forward R  Section No. 2  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  ZSMpa/19mm Concrete  Strip footings and Column Bases m3 26.61  Surface beds on waterproofing m3 26.09  Columns m3 0.15  Apron m3 9.08  Roof Beam m3 6.00

	Brought Forward			R	
,	SMOOTH FORMWORK				
	Smooth formwork to soffits				
6	Slab and Roof Beam	m2	86.36		
	TEST CUBES				
7	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	4.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a power float				
8	Surface beds, slabs, etc	m2	261.00		
	Finishing top of surface bed smooth with a wood float				
9	Apron	m2	160.00		
	MOVEMENT JOINT				
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
10	Not exceeding 300mm high to edges of surface bed	m	289.65		
	Section No. 2			R	
	Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
3	10mm Construction joint between vertical concrete surfaces, debonded with Lime Wash or Bitumen, groove and sealant saw cut filled with Polysulphide sealant Durakol 25 or Similar approved with Polyethylene bond breaker backing tape				
11	Surface beds and Apron not exceeding 300mm thick	m	41.80		
	Saw cut joint with Mutlipoxy 1308				
12	Surface bed not exceeding 300mm thick	m	25.98		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
13	8mm diameter bars	t	0.65		
	High tensile reinforcement for structural concrete work				
14	8mm Diameter bars	t			
15	10mm Diameter bars	t	1.00		
16	12mm Diameter bars	t	0.49		
17	16mm Diameter bars	t	0.08		
	Fabric mesh reinforcement				
18	Type Ref 193 fabric reinforcement in concrete slabs etc.	m2	340.63		
19	Type Ref 100 fabric reinforcement on ceilings	m2	240.84		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount	
	SECTION 2 : BLOCK 1 ADMIN					
	BILL NO.3 - MASONRY					
	SUPPLEMENTARY PREAMBLES					
	Sizes in descriptions					
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick					
	Face bricks					
	Bricks shall be ordered timorously to obtain uniformity in size and colour					
	FOUNDATION BRICKWORK					
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)					
1	Half brick walls	m2	100.50			
2	One brick walls	m2	238.73			
3	Columns	m3	0.39			
	SUPERSTRUCTURE BRICKWORK					
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)					
4	Half Brick Walls	m2	200.37			
5	One Brick Walls	m2	271.31			
6	One and a half Brick walls	m2	10.97			
7	One brick gable Walls	m2	34.60			
8	Half brick wall in beamfilling	m2	21.99			
						L
	Carried Forward Section No. 2 Bill No. 3 MASONRY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
9	Columns	m3	0.72		
	BRICKWORK SUNDRIES				
	2.5mm Brickwork Reinforcement				
10	75mm Wide built in horizontally	m	1 541.90		
11	150mm Wide built in horizontally	m	2 202.87		
	FACE BRICKWORK				
	Moroccan red blend travertine or similar approved face bricks pointed with flush horizontal and vertical joints				
12	Extra over brickwork for face brickwork in foundations (provisional)	m2	21.60		
13	Extra over brickwork for face brickwork	m2	162.43		
14	Extra over brickwork for brick-on-edge header course lintels 1 course(s) high, pointed on face	m	13.00		
	Brick-on-edge header coarse copings, sills etc of Moroccan red blend travertine or similar approved face bricks, pointed with recessed joints on all exposed faces				
15	220mm Wide sills set sloping and slightly projected	m	24.00		
	Carried Forward to Summary of Section No. 2 Section No. 2			R	
	Bill No. 3 MASONRY				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
1	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.4 - WATERPROOFING			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	DAMPPROOFING OF WALLS AND FLOORS			
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)			
1	In walls m2	78.71		
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape			
2	Under Surface bed m2	289.85		
	Carried Forward to Summary of Section No. 2 Section No. 2		R	
	Bill No. 4 WATERPROOFING			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.5 - ROOF COVERING			
	SUPPLEMENTARY PREAMBLES			
	IBR ROOF COVERING			
	<u>Guarantees</u>			
	The contractor will be required to provide a written guarantee for the roof covering as follows:			
	IBR roof covering material - 10 years Workmanship - 10 years			
	Certificate for Galvanised Roof Sheeting			
	The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified			
	<b>Note:</b> Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	IBR PROFILE SHEETING			
	IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins			
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	337.25		
	Carried Forward  Section No. 2  Bill No. 5  ROOF COVERING		R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	ſ
	ROOF AND WALL INSULATION				
	Sisalation 405 Reflective foil underlay in accordance with SANS 1381-4 overlapped longitudinally by 100mm; on and including galvanised straining wire spaced at 383mm centres fixed parallel over purlins to manufacturer's instruction				
2	Insulation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrently with roof covering with minimum 150mm stapled laps including galvanised straining wires at not exceeding 400mm centres and one-sided tape at edges where required (Layer 1) (LI)	m2	320.39		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 5			R	<del></del>
	ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.6 - CARPENTRY AND JOINERY			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	Carried Forward Section No. 2		R	
	Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Brought Forward			R		
PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC					
SUPPLEMENTARY PREAMBLES					
Trusses are at maximum 1 200mm centres					
Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins					
References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes					
Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences					
Sawn softwood trusses					
Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc	m2	337.25			
Sundries					
30x1.6mm Galvanised steel straps built 600mm deep into brickwork	No	137.35			
Two Coats creosote on sawn timbers	m2	130.79			
Engineers Certificate		Item			
EAVES, VERGES, ETC					
Carried Forward  Section No. 2  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC  SUPPLEMENTARY PREAMBLES  Trusses are at maximum 1 200mm centres  Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins  References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities) for tender purposes  Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences  Sawn softwood trusses  Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc  Sundries  30x1.6mm Galvanised steel straps built 600mm deep into brickwork  Two Coats creosote on sawn timbers  Engineers Certificate  EAVES, VERGES, ETC  Carried Forward  Section No. 2  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC  SUPPLEMENTARY PREAMBLES  Trusses are at maximum 1 200mm centres  Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins  References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities?) for tender purposes  Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences  Sawn softwood trusses  Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc m2  Sundries  30x1.6mm Galvanised steel straps built 600mm deep into brickwork No  Two Coats creosote on sawn timbers m2  Engineers Certificate  EAVES, VERGES, ETC  Carried Forward  Section No. 2 Bill No. 6  CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC  SUPPLEMENTARY PREAMBLES  Trusses are at maximum 1 200mm centres  Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins  References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities (accompanying these bills of quantities) for tender purposes  Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences  Sawn softwood trusses  Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc m2 337.25  Sundries  30x1.6mm Galvanised steel straps built 600mm deep into brickwork No 137.35  Two Coats creosote on sawn timbers m2 130.79  Engineers Certificate ltem  EAVES, VERGES, ETC  Carried Forward  Section No. 2 Bill No. 6  CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC  SUPPLEMENTARY PREAMBLES  Trusses are at maximum 1 200mm centres  Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins  References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered ? annexed to these bills of quantities (accompanying these bills of quantities) for tender purposes  Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect's/engineer and/or taken on site before design or fabrication commences  Sawn softwood trusses  Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geyers, etc m2 337.25  Sundries  30x1.6mm Galvanised steel straps built 600mm deep into brickwork No 137.35  Two Coats creosote on sawn timbers m2 130.79  Engineers Certificate Item  EAVES, VERGES, ETC  Carried Forward R  Section No. 2  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC  SUPPLEMENTARY PREAMBLES Trusses are at maximum 1 200mm centres  Roof coverings are IBR-profile 0.58mm thick 2275 spelter galvanised steel roof sheeting on purlins  References given in descriptions refer to the respective types of trusses detailed on the architect's engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities) for tender purposes  Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences  Sawn softwood trusses  Roof construction to 17 degree double pitched roof with SA Prine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc m2 337.25  Sundries  30x1.6mm Galvanised steel straps built 600mm deep into brickwork No 137.35  Two Coats creosote on sawn timbers m2 130.79  Engineers Certificate ltem  EAVES, VERGES, ETC  Carried Forward R  Section No. 2  Bill No. 6  CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02

	Brought Forward			R	
ļ	Medium density plain fibre-cement fascia's and barge boards				
5	Everite medium density plain ungrooved Nutec fascia boards (Code: 041-202), size 225x12mm, fixed to 76x50mm SAP timber tilter batten and 38x38mm SAP timber support battens between rafters twice screwed with 12x40mm countersunk brass screws at 900mm c/c to support battens with aluminium H-profile fascia joiner between boards and aluminium H-profile fascia corner joiners at board ends.	m	56.59		
	SKIRTINGS				
	Fine grained compresses woodpulp / cane purpose made				
6	76 x 19 mm Skirtings, nailed	m	289.65		
	DOORS				
	Masonite backing side hung doors				
7	Hardwood double door 44 x 1613 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	2.00		
8	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	4.00		
9	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	No	13.00		
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
	SUPPLEMENTARY PREAMBLES				
	Carried Forward Section No. 2 Bill No. 6 CARPENTRY AND JOINERY			R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward	R	
	<u>General</u>		
	All units shall include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or varnish finishes, etc		
	Prices are to include for all necessary filler pieces against walls etc		
	References		
	Carcasses - white melamine.		
	Doors and seen ends - petrol blue melamine with impact edging.		
	Counter tops - melawood in colour supamatt storm grey, square line.		
	Door / Drawer Handles - 196mm ROCO - square bar stainless steel handle."		
	Built in cupboards and Shelves		
10	As per specialist for the supply and installation of built in cupboards and shelves as indicated on Argitectural Drawings	SUM	
	Carried Forward to Summary of Section No. 2 Section No. 2	R	
	Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		
	•		

Item No		Quantity	Rate	Amount	
	SECTION 2 : BLOCK 1 ADMIN				
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<u>Ceilings</u>				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
					_
	Carried Forward Section No. 2		R		
	Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	240.84		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	1.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	256.76		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	240.84		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING			R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.8 - FLOOR COVERINGS, WALL LININGS, ETC			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	FLOOR COVERING			
	300 x 300 x 2mm semi flexible vinyl tiles			
1	On floors m	2 260.88		
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2 Bill No. 8 FLOOR COVERINGS, WALL LININGS, ETC Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
	SECTION 2 : BLOCK 1 ADMIN	•			
	BILL NO.9 - IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	LOCKS				
	Manufactured by approved supplier				
1	1Pr. Duba One lever handles on plate	No	19.00		
2	Euro profile cylinder SASH Lock - Chrome Plated	No	19.00		
3	66mm Privacy cylinder - Nickle Plated	No	19.00		
4	Rebate conversion set	No	2.00		
5	300mm Flush bolt - Satin Chrome	No	2.00		
6	150mm Flush bolt - Satin Chrome	No	2.00		
	SUNDRIES				
	Manufactured by approved supplier				
7	Floor mounted door stop - Satin Chrome	No	19.00		
	Carried Forward  Section No. 2  Bill No. 9  IRONMONGERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
8	175mm Floor operated door holder	No	2.00		
9	Coat Hook	No	7.00		
10	160x160x2mm Push Plate	No	13.00		
	<u>FURNITURE</u>				
	As per Architects Furniture Schedule Rev.00				
	RECEPTION				
11	Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H	No	1.00		
12	Economy Upholstered Side Chair - Steel main frame - blue material 450mmH	No	2.00		
13	Economy Upholstered Typist Chair - swivel, without arms on 5 star base, blue material	No	1.00		
14	3 Tier Shelving Unit - 21mm Saligna: 900x300x1200mmH	No	1.00		
	PRINT ROOM, STOCK ROOM, PASTORAL ROOM				
15	Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H	No	1.00		
16	Economy Upholstered Typist Chair - swivel, without arms on 5 star base, blue material	No	1.00		
17	Economy Upholstered Side Chair - Steel main frame - blue material 450mmH	No	2.00		
	SICK ROOMS 1 & 2				
18	Hospital Bed with static headrest - Heaf & foot bow, welmesh base:1970x915x500/640/850mmH	No	2.00		
19	Mattress: Navy PVC cover: 1880x900x100mm	No	2.00		
	Carried Forward Section No. 2 Bill No. 9 IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
20	Upholstered Side Chair with Arms - Steel main frame, Upholstered seat & back, 450mmH	No	2.00		
	<u>PRINCIPAL</u>				
21	Desk, 3 Drawers on right hand side - 32mm Edged Natural Oak Melamine: 1600x900x750mmH	No	1.00		
22	3 Tier Shelving Unit - 21mm Saligna: 900x300x1200mmH	No	1.00		
23	Link, Small, Right - 32mm Edged Natural Oak Melamine: 900x500x32mm	No	1.00		
24	Credenza, Sliding Doors - 32mm Edged Natural Oak Melamine: 900x450x750mm	No	1.00		
25	Principal's High Back Chair with Arms - Swivel and tilt, with arms on 5 star base, Upholstered seat & back, Gas height adjustable	No	1.00		
26	Upholstered Side Chair with Arms - Steel main frame, Upholstered seat & back, 450mmH	No	2.00		
27	Filing Cabinet, 4 Drawers - Edged Natural Oak Melamine: 487x550x1350mmH	No	1.00		
28	Glazed Door Bookcase - Saligna/Okoume veneer: 900x360x1500mmH	No	1.00		
29	Correspondence Rack, 3 Division - Edged Natural Oak Melamine: 770x353x76mmH	No	1.00		
30	Stationery Cupboard, 2 Doors - Edged Natural Oak Melamine: 900x360x1500mmH	No	1.00		
	DEPUTY PRINCIPAL X 2				
31	Desk, 3 Drawers on right hand side - 32mm Edged Natural Oak Melamine: 1600x900x750mmH	No	1.00		
32	Link, Small, Right - 32mm Edged Natural Oak Melamine: 900x500x32mm	No	1.00		
					L
	Carried Forward			R	
	Section No. 2 Bill No. 9 IRONMONGERY				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
33	Credenza, Sliding Doors - 32mm Edged Natural Oak Melamine: 900x450x750mm	No	1.00		
34	Deputy Principal's High Back Chair with Arms - Swivel and tilt, with arms on 5 star base, Upholstered seat & back, Gas height adjustable	No	1.00		
35	Upholstered Side Chair with Arms - Steel main frame, Upholstered seat & back, 450mmH	No	2.00		
36	Stationery Cupboard, 2 Doors - Edged Natural Oak Melamine: 900x360x1500mmH	No	1.00		
	STAFF ROOM				
37	Rectangular Table: Steel frame, Saligna top: 1800x900x700mmH	No	4.00		
38	Economy Upholstered Side Chair - Steel main frame - blue material 450mmH	No	14.00		
39	Bulletin Boards: 2400x1200mm: Carpet Pinning Board	No	4.00		
	Countried Formulated Community of Continue No. Co.				
	Carried Forward to Summary of Section No. 2 Section No. 2			R	
	Bill No. 9 IRONMONGERY Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
1	SECTION 2 : BLOCK 1 ADMIN				
	BILL NO.10 - PLUMBING AND DRAINAGE				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	BATHROOM FITTINGS				
	Manufactured by Cobra or similar approved				
1	LECICO NEON Front Flush Closed Couple Toilet Suite without toilet seat (or equal approved) Codes: Cistern: NEOCISFFL0NOMUE Pan: NEOPANFLO0000UE	No	4.00		
2	BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT	No	5.00		
3	COBRA screw-down angle regulating valve for flexible tubes chrome plated. Includes 1/2"(15mm) male inlet and 1/2"(15mm) female outlet, and sliding wall flange. (or equal approved) Code: 232-10	No	5.00		
4	COBRA 350mm long; 1/2"(15mm) x 1/2" (15mm) Female to Female Flexible Connector. (or equal approved) Code: C-15/350	No	5.00		
	approved, code. o-10/000	•	3.00		
	Carried Forward			R	
	Section No. 2 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

ĺ	Brought Forward			R	
5	COBRA "WELCOME" medium wall hung basin. (430 x 390mm) 1 x punched tap hole in centre of basin. Includes wall fixing set. (or equal approved) Code: CWLBAWH2-6DT01	No	5.00		
6	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	5.00		
7	COBRA basin type bottle trap with 75mm deep seal and telescopic waste connection pipe. 1¼ female inletconnection; 1½ male outlet connection. Brass body, chrome plated. (or equal approved) Code: 350/N	No	5.00		
8	GROHE EUROECO Cosmopolitan T Self Closing Pillar Tap. Grohe ECOJOY 5.7lt/min flow limiter with 3 adjustable flow times, short, medium and long. Approx 7; 15; 30 second (Pressure dependant) minimum recommended operation pressure 100kPa. (or equal approved) Code: G-36265000	No	4.00		
9	COBRA "PAUSE" Urinal, ultra eco design with a water saving 0.9lt flush. Compact concealed trapway. Suitable for back entry flushing mechanisms. (or equal approved) Code: CSPURWH1-6DT01	No	2.00		
10	COBRA Self closing metering under tile tap, non-hold open with flow controller with a flow cycle of 1 - 20 seconds, 15mm BSP male inlet, and stainless steel flange. Vandal resistant and water saving product. (or equal approved) Code: KM2-301/N	No	2.00		
11	FRANKE RODAN towel roll holder (or equal approved) Code: RODX672	No	4.00		
12	FRANKE RODAN soap dispenser (or equal approved) Code: RODX619	No	3.00		
13	FRANKE STRATOS paper towel dispenser (or equal approved) Code: STRX637	No	2.00		
14	FRANKE RODAN waste bin (or equal approved) Code: RODX605	No	2.00		
	Carried Forward Section No. 2 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
15	LECICO ATLAS raised paraplegic closed couple water closet with side lever; wall mounted dogleg grab rail and cistern grab rail combo. W=443mm H=855mm D=731mm White vitreous china. (or equal approved) Code: PARSETCCB0RAIBE	No	1.00		
16	COBRA Elbow actionpillar tap. With 1/4 turn ceramic disc headpart, flanged backnut and blue indice for cold water application. 1/2"(15mm)BSP male iron connection end. (or equal approved) Code: FEAPILEA-5JT01	No	1.00		
17	NEOPERL PCW-02 washer regulator @ 2lt/min; flexible turbine for secure positioning and pressure compensating. Fits 1/2" bib and pilar taps, (or equal approved)	No	1.00		
18	FRANKE RODAN electronic hand dryer (or equal approved) Code: RODX310	No	1.00		
19	FRANKE EXOS toilet roll holder (or equal approved) Code: EXOS675X	No	1.00		
20	ICONOMY simple shelf (or equal approved) Code: RODX619	No	1.00		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 2 : BLOCK 1 ADMIN				
	BILL NO.11 - METALWORKS				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	DOORS				
	<u>Fire Doors</u>				
	Fire doors are to be in accordance with SANS 1253				
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
	<u>General</u>				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	Carried Forward  Section No. 2  Bill No. 11  METALWORKS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate		R		_

	Brought Forward			R	
	PRESSED STEEL DOOR FRAMES				
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 220mm wall				
1	Frame for door 1613 x 2032mm high	No	2.00		
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 110mm wall				
2	Frame for door 813 x 2032mm high door	No	17.00		
	ALUMINIUM WINDOWS AND DOORS				
	Matt light grey powder coated windows Glazed with GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
3	900x1200mm Window (W01)	No	14.00		
4	900x900mm Window (W02)	No	3.00		
	Carried Forward			R	
	Section No. 2 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
5	Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
5	900x900mm Window (W03)	No	6.00		
6	600x600mm Window (W04)	No	4.00		
	STEEL ROLLER SHUTTERS ETC				
	Galvanised steel roller shutters with 76mm slats (18kg/m²), fixed to brickwork or concrete				
7	Manual push-up slatted roller shutter for 1200 x 2000mm high opening	No	1.00		
	STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC				
8	Strongroom doors etc suitable for 230mm walls fixed to brickwork or concrete	No	1.00		
	STEEL GATES, SCREENS, ETC				
	Welded screens and gates				
9	Gate 5	No	1.00		
10	Gate 7	No	1.00		
11	Gate 8	No	1.00		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 11			R	
	METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.12 - PLASTERING			
	SCREEDS			
	Screeds wood floated, on concrete			
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding	260.88		
	INTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
2	On walls m2	727.05		
3	On narrow widths m2	13.00		
	EXTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
4	On walls m2	110.55		
	Cement plaster steel trowelled on concrete			
5	Plaster to roof beam m2	76.17		
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2 Bill No. 12			
	PLASTERING Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 2 : BLOCK 1 ADMIN					
	BILL NO.13 - TILING					
	SUPPLEMENTARY PREAMBLES					
	<u>Fixing</u>					
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding					
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat					
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" ("Ceresit Tylon"?) range of products as recommended by the manufacturer of the tiles					
	WALL TILING					
	152x152x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors					
1	On walls	m	4.61			
	SUNDRIES					
	Anodised aluminium corner protectors, stair nosing, expansion joint strips, etc					
2	10mm Straight edge corner protectors	m	7.30			
3	15mm Straight edge weather strip	m	4.00			
4	T-Piece/Expansion	m	10.00			
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 13 TILING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		

Item No		Quantity	Rate	Amount
	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.14 - GLAZING			
	SUPPLEMENTARY PREAMBLES			
	Float glass			
	The term "float glass" is used for monolithic glass			
	MIRRORS			
	Silvered floated glass copper backed mirrors with polished edges, fixed to wall with double sided adhesive tape and silicone			
1	Mirror 450 x 600mm high	7		
	Carried Forward to Summary of Section No. 2 Section No. 2		R	
	Bill No. 14 GLAZING			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 2 : BLOCK 1 ADMIN					
	BILL NO.15 - PAINTWORK					
	SUPPLEMENTARY PREAMBLES					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with Architect specifications unless otherwise described					
	COLOURS					
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
1	Walls	m2	739.48			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
2	Walls and beams	m2	201.03			
	ON SMOOTH CONCRETE SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
3	Slab	m2	10.19			
	ON FIBRE-CEMENT SURFACES					
						_
	Carried Forward  Section No. 2  Bill No. 15  PAINTWORK  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		
						i

	Brought Forward			R		Ī
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
4	Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	44.88			
5	Ceilings and cornices	m2	240.84			
	ON METAL SURFACES					
	One coat metal primer and two coats Plascon Velvegro, on steel					
6	Door frames	m2	18.84			
7	Gates	m2	26.00			
	ON WOOD SURFACES					
	One coat primer and two coats premium quality polyurethane enamel paint					
8	External door	m2	13.22			
	Three coats superior quality clear matt varnish					
9	Internal Door	m2	56.17			
						_
	Carried Forward to Summary of Section No. 2 Section No. 2			R		<u> </u>
	Bill No. 15 PAINTWORK					
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					
'		1	1	ļ	II	1

	SECTION SUMMARY - SECTION 2: BLOCK 1 ADMIN			
Bill No		Page No		Amount
1	EARTHWORKS (PROVISIONAL)	5		
2	CONCRETE, FORMWORK AND REINFORCEMENT	8		
3	MASONRY	10		
4	WATERPROOFING	11		
5	ROOF COVERING	13		
6	CARPENTRY AND JOINERY	17		
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	19		
8	FLOOR COVERINGS, WALL LININGS, ETC	20		
9	IRONMONGERY	24		
10	PLUMBING AND DRAINAGE	27		
11	METALWORKS	30		
12	PLASTERING	31		
13	TILING	32		
14	GLAZING	33		
15	PAINTWORK	35		
			_	
	Carried to Final Summary Section No. 2		R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			
		I	I	ı I

Item No			Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE				
	BILL NO.1 - EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site				
	Excavation				
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. "Soft rock" and "hard rock" shall be as defined in "Earthworks"				
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill				
	EXCAVATIONS				
	Excavations in earth not exceeding 2m deep				
1	Foundations	m3	131.22		
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	69.81		
	Carried Forward  Section No. 3  Bill No. 1  EARTHWORKS (PROVISIONAL)  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Keeping excavations free of water				
3	Keeping excavations free of water other than subterranean water (Proven Method and Expenditure)		Item		
	FILLING				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
4	Backfilling to strip footings, bases etc	m3	61.42		
	Compaction of surfaces				
5	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	383.54		
	Prescribed density tests on filling				
6	"Modified AASTHO Density" test	No	7.66		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
7	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	335.20		
8	To bottoms and sides of trenches etc	m2	479.72		
	Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount	
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE					
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
	SUPPLEMENTARY PREAMBLES					
	Cost of test					
	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)					
	<u>Formwork</u>					
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25Mpa/19mm Concrete					
1	Strip footings and Column Bases	m3	25.64			
2	Surface beds on waterproofing	m3	27.42			
3	Columns	m3	0.43			
4	Apron	m3	6.95			
						_
	Section No. 3 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
5	Roof Beam	m3	6.00		
	SMOOTH FORMWORK				
	Smooth formwork to soffits				
6	Roof Beam	m2	82.35		
	TEST CUBES				
7	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	4.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a power float				
8	Surface beds, slabs, etc	m2	275.00		
	Finishing top of surface bed smooth with a wood float				
9	Apron	m2	123.00		
	MOVEMENT JOINT				
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
10	Not exceeding 300mm high to edges of surface bed	m	233.82		
	Carried Forward  Section No. 3  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
1	10mm Construction joint between vertical concrete surfaces, debonded with Lime Wash or Bitumen, groove and sealant saw cut filled with Polysulphide sealant Durakol 25 or Similar approved with Polyethylene bond breaker backing tape				
11	Surface beds and Apron not exceeding 300mm thick	m	59.10		
	Saw cut joint with Mutlipoxy 1308				
12	Surface bed not exceeding 300mm thick	m	45.02		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
13	8mm diameter bars	t	0.63		
	High tensile reinforcement for structural concrete work				
14	8mm Diameter bars	t			
15	10mm Diameter bars	t	0.85		
16	12mm Diameter bars	t	0.47		
17	16mm Diameter bars	t	0.04		
	Fabric mesh reinforcement				
18	Type Ref 193 fabric reinforcement in concrete slabs etc.	m2	335.20		
19	Type Ref 100 fabric reinforcement on ceilings	m2	200.76		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE				
	BILL NO.3 - MASONRY				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timorously to obtain uniformity in size and colour				
	FOUNDATION BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
1	Half brick walls	m2	24.81		
2	One brick walls	m2	273.14		
3	Columns	m3	1.21		
	SUPERSTRUCTURE BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
4	Half Brick Walls	m2	40.28		
5	One Brick Walls	m2	302.96		
6	One brick gable Walls	m2	51.93		
7	Half brick wall in beamfilling	m2	15.48		
	Carried Forward  Section No. 3  Bill No. 3  MASONRY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
8	Columns	m3	2.24		
	BRICKWORK SUNDRIES				
	2.5mm Brickwork Reinforcement				
9	75mm Wide built in horizontally	m	371.41		
10	150mm Wide built in horizontally	m	2 473.73		
	FACE BRICKWORK				
	Moroccan red blend travertine or similar approved face bricks pointed with flush horizontal and vertical joints				
11	Extra over brickwork for face brickwork in foundations (provisional)	m2	34.36		
12	Extra over brickwork for face brickwork	m2	250.28		
13	Extra over brickwork for brick-on-edge header course lintels 1 course(s) high, pointed on face	m	55.00		
	Brick-on-edge header coarse copings, sills etc of Moroccan red blend travertine or similar approved face bricks, pointed with recessed joints on all exposed faces				
14	220mm Wide sills set sloping and slightly projected	m	24.00		
				_	
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	Bill No. 3 MASONRY				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			
	BILL NO.4 - WATERPROOFING			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	DAMPPROOFING OF WALLS AND FLOORS			
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)			
1	In walls m2	82.76		
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape			
2	Under Surface bed m2	297.58		
	Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 4 WATERPROOFING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R	
	Tshedimoso Elemental Estimate Rev02			

Item No		Quantity	Rate	Amount	
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE				
	BILL NO.5 - ROOF COVERING				
	SUPPLEMENTARY PREAMBLES				
	IBR ROOF COVERING				
	<u>Guarantees</u>				
	The contractor will be required to provide a written guarantee for the roof covering as follows:				
	IBR roof covering material - 10 years Workmanship - 10 years				
	Certificate for Galvanised Roof Sheeting  The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	IBR PROFILE SHEETING  IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins				
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	337.97			
	Carried Forward  Section No. 3  Bill No. 5  ROOF COVERING  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate		R		_

	Brought Forward			R	
2	ROOF AND WALL INSULATION  Sisalation 405 Reflective foil underlay in accordance with SANS 1381-4 overlapped longitudinally by 100mm; on and including galvanised straining wire spaced at 383mm centres fixed parallel over purlins to manufacturer's instruction  Insulation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrently with roof covering with minimum 150mm stapled laps including galvanised straining wires at not exceeding 400mm centres and one-sided tape at edges where required (Layer 1) (LI)	m2	321.07		
	Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 5 ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			
	BILL NO.6 - CARPENTRY AND JOINERY			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	Carried Forward Section No. 3 Bill No. 6		R	
	CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			
		1		

	Brought Forward			R	Ī
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	SUPPLEMENTARY PREAMBLES				
	Trusses are at maximum 1 200mm centres				
	Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins				
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered ? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	Sawn softwood trusses				
1	Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc	m2	337.97		
	Sundries				
2	30x1.6mm Galvanised steel straps built 600mm deep into brickwork	No	99.03		
3	Two Coats creosote on sawn timbers	m2	97.64		
4	Engineers Certificate		Item		
	EAVES, VERGES, ETC				
	Carried Forward  Section No. 3  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Medium density plain fibre-cement fascia's and barge boards				
5	Everite medium density plain ungrooved Nutec fascia boards (Code: 041-202), size 225x12mm, fixed to 76x50mm SAP timber tilter batten and 38x38mm SAP timber support battens between rafters twice screwed with 12x40mm countersunk brass screws at 900mm c/c to support battens with aluminium H-profile fascia joiner between boards and aluminium H-profile fascia corner joiners at board ends.	m	60.68		
	<u>SKIRTINGS</u>				
	Fine grained compresses woodpulp / cane purpose made				
6	76 x 19 mm Skirtings, nailed	m	233.82		
	DOORS				
	Masonite backing side hung doors				
7	Hardwood door 44 x 813 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	3.00		
8	Hardwood door 44 x 1613 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	2.00		
9	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood skrewes	No	2.00		
10	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	No	5.00		
	Built-in cupboards and shelves				
11	As per specialist for the supply and installation of built in indicated on Argitectural Drawings			SUM	
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
- 1	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE				
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	Ceilings				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	Section No. 3 Bill No. 7		R		
	CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
I.	6mm Everite Nutec ceilings		ľ		
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	200.76		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	2.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	149.83		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	200.76		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			
	BILL NO.8 - FLOOR COVERINGS, WALL LININGS, ETC			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	FLOOR COVERING			
	300 x 300 x 2mm semi flexible vinyl tiles			
1	On floors m2	274.19		
	Carried Forward to Summary of Section No. 3		R	
	Section No. 3 Bill No. 8 FLOOR COVERINGS, WALL LININGS, ETC Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE				
	BILL NO.9 - IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	LOCKS				
	Manufactured by approved supplier				
1	1Pr. Duba One lever handles on plate	No	12.00		
2	Euro profile cylinder SASH Lock - Chrome Plated	No	12.00		
3	66mm Privacy cylinder - Nickle Plated	No	12.00		
4	Rebate conversion set	No	2.00		
5	300mm Flush bolt - Satin Chrome	No	2.00		
6	150mm Flush bolt - Satin Chrome	No	2.00		
	SUNDRIES				
	Carried Forward  Section No. 3  Bill No. 9  IRONMONGERY  Tshedimoso Elemental Estimate Rev02			R	
	Stage 3 - Elemental Estimate				

	Brought Forward			R	
I.	Manufactured by approved supplier				
7	Floor mounted door stop - Satin Chrome	No	12.00		
8	175mm Floor operated door holder	No	2.00		
9	Coat Hook	No	4.00		
10	160x160x2mm Push Plate	No	6.00		
	<u>FURNITURE</u>				
	As per Architects Furniture Schedule Rev.00				
11	Rectangular Table: Saligna top with 32mm square steel legs: 1800x900x700mmH	No	5.00		
12	Secondary Chair - Stackable steel frame, large orange polyprop seat:450mmH	No	20.00		
13	Bulletin Boards: 2400x1200mm: Carpet Pinning Board	No	1.00		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 9 IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			
	BILL NO.10 - PLUMBING AND DRAINAGE			
	SUPPLEMENTARY PREAMBLES			
	Proprietary items			
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items			
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered			
	On request returnable samples are to be provided to the principal agent for consideration			
	BATHROOM FITTINGS			
	Manufactured by Cobra or similar approved			
1	LECICO NEON Front Flush Closed Couple Toilet Suite without toilet seat (or equal approved) Codes: Cistern: NEOCISFFL0NOMUE Pan: NEOPANFL00000UE	o 2.00		
2	BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT	o 2.00		
3	COBRA screw-down angle regulating valve for flexible tubes chrome plated. Includes 1/2"(15mm) male inlet and 1/2"(15mm) female outlet, and sliding wall flange. (or equal approved) Code: 232-10	o 2.00		
	Carried Forward  Section No. 3  Bill No. 10  PLUMBING AND DRAINAGE  Tshedimoso Elemental Estimate Rev02		R	
	Stage 3 - Elemental Estimate			

	Brought Forward			R	
4	COBRA 350mm long; 1/2"(15mm) x 1/2" (15mm) Female to Female Flexible Connector. (or equal approved) Code: C-15/350	No	2.00		
5	COBRA "WELCOME" medium wall hung basin. (430 x 390mm) 1 x punched tap hole in centre of basin. Includes wall fixing set. (or equal approved) Code: CWLBAWH2-6DT01	No	4.00		
6	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	4.00		
7	COBRA basin type bottle trap with 75mm deep seal and telescopic waste connection pipe. 1¼ female inletconnection; 1½ male outlet connection. Brass body, chrome plated. (or equal approved) Code: 350/N	No	4.00		
8	GROHE EUROECO Cosmopolitan T Self Closing Pillar Tap. Grohe ECOJOY 5.7lt/min flow limiter with 3 adjustable flow times, short, medium and long. Approx 7; 15; 30 second (Pressure dependant) minimum recommended operation pressure 100kPa. (or equal approved) Code: G-36265000	No	4.00		
9	FRANKE RODAN towel roll holder (or equal approved) Code: RODX672	No	2.00		
10	FRANKE RODAN soap dispenser (or equal approved) Code: RODX619	No	2.00		
11	FRANKE STRATOS paper towel dispenser (or equal approved) Code: STRX637	No	2.00		
12	FRANKE RODAN waste bin (or equal approved) Code: RODX605	No	2.00		
	Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			
	BILL NO.11 - METALWORKS			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	DOORS			
	Fire Doors			
	Fire doors are to be in accordance with SANS 1253			
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC			
	Carried Forward		R	
	Section No. 3 Bill No. 11			
	METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
	General				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc  Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	Treambles for mades believe prioring alle bill				
	PRESSED STEEL DOOR FRAMES				
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 220mm wall				
1	Frame for door 813 x 2032mm high door	No	3.00		
2	Frame for door 1613 x 2032mm high door	No	2.00		
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 110mm wall				
3	Frame for door 813 x 2032mm high door	No	7.00		
	ALUMINIUM WINDOWS AND DOORS				
	Carried Forward Section No. 3 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
					l

	Brought Forward			R	
	Matt light grey powder coated windows Glazed with GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
4	900x1200mm Window (W01)	No	7.00		
	Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
5	600x900mm Window (W04)	No	2.00		
6	900x900mm Window (W06)	No	17.00		
7	STEEL ROLLER SHUTTERS ETC  Galvanised steel roller shutters with 76mm slats (18kg/m²), fixed to brickwork or concrete  Manual push-up slatted roller shutter for 1200 x 2000mm high opening  STEEL GATES, SCREENS, ETC	No	1.00		
	Welded screens and gates				
8	Gate 5	No	3.00		
	Carried Forward Section No. 3 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
9	Gate 10	No	1.00		
10	Gate 12	No	2.00		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
1	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			S.	
	BILL NO.12 - PLASTERING				
	SCREEDS				
	Screeds wood floated, on concrete				
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding	m2	274.19		
	INTERNAL PLASTER				
	Cement plaster steel trowelled on brickwork				
2	On walls	m2	391.86		
3	On narrow widths	m2	15.00		
	EXTERNAL PLASTER				
	Cement plaster steel trowelled on brickwork				
4	On walls	m2	158.65		
	Cement plaster steel trowelled on concrete				
5	Plaster to roof beam	m2	82.35		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 12 PLASTERING			, A	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Ī	Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE				
	BILL NO.13 - TILING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" ("Ceresit Tylon"?) range of products as recommended by the manufacturer of the tiles				
	WALL TILING				
	152x152x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors				
1	On walls	m	11.65		
	SUNDRIES				
	Anodised aluminium corner protectors, stair nosing, expansion joint strips, etc				
2	10mm Straight edge corner protectors	m	8.21		
3	15mm Straight edge weather strip	m	6.00		
	Carried Forward  Section No. 3  Bill No. 13  TILING  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Bro	ought Forward			R		
	T-Piece/Expansion		m	10.00			
	Carried Forward to Summary of Section No. 3	Section No. 3			R		
	Bill No. 13 TILING						
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate						
	<u>.</u>						
ı			ı	ı	ı		

Item No		Quantity	Rate	Amount
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE			
	BILL NO.14 - GLAZING			
	SUPPLEMENTARY PREAMBLES			
	Float glass			
	The term "float glass" is used for monolithic glass			
	<u>MIRRORS</u>			
	Silvered floated glass copper backed mirrors with polished edges, fixed to wall with double sided adhesive tape and silicone			
1	Mirror 450 x 600mm high	4		
	Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 14 GLAZING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R	

Item No			Quantity	Rate	Amount	
	SECTION 3 : BLOCK 2 DINING AND NUTRITION STRUCTURE					
	BILL NO.12 - PAINTWORK					
	SUPPLEMENTARY PREAMBLES					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with Architect specifications unless otherwise described					
	COLOURS					
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
1	Walls	m2	406.10			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
2	Walls and beams	m2	241.00			
	ON FIBRE-CEMENT SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
3	Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	47.94			
	Carried Forward			R		
	Section No. 3 Bill No. 15 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			, i		

	Brought Forward	1		R		
4	Ceilings and cornices	m2	200.76		I	
	ON METAL SURFACES					
	One coat metal primer and two coats Plascon Velvegro, on steel					
5	Door frames	m2	11.31			
6	Gates	m2	21.00			
	ON WOOD SURFACES					
	One coat primer and two coats premium quality polyurethane enamel paint					
7	External door	m2	23.13			
	Three coats superior quality clear matt varnish					
8	Internal Door	m2	23.13			
	Carried Forward to Summary of Section No. 3 Section No. 3			R		<u> </u>
	Bill No. 15 PAINTWORK					
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					
		1	1	'	1	•

	SECTION SUMMARY - SECTION 3 : BLOCK 2 DINING AND NUTR	ITION CEN	1	
Bill No		Page No		Amount
1	EARTHWORKS (PROVISIONAL)	38		
2	CONCRETE, FORMWORK AND REINFORCEMENT	41		
3	MASONRY	43		
4	WATERPROOFING	44		
5	ROOF COVERING	46		
6	CARPENTRY AND JOINERY	49		
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	51		
8	FLOOR COVERINGS, WALL LININGS, ETC	52		
9	IRONMONGERY	54		
10	PLUMBING AND DRAINAGE	56		
11	METALWORKS	60		
12	PLASTERING	61		
13	TILING	63		
14	GLAZING	64		
15	PAINTWORK	66		
	Carried to Final Summary		R	
	Section No. 3 Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			
			I	

Item No		Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.1 - EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site				
	Excavation				
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. " Soft rock" and "hard rock" shall be as defined in "Earthworks"				
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill				
	EXCAVATIONS				
	Excavations in earth not exceeding 2m deep				
1	Foundations m3	82.28			
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor m3	48.72			
					_
	Carried Forward		R		
	Section No. 4 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Keeping excavations free of water			ľ	
3	Keeping excavations free of water other than subterranean water (Proven Method and Expenditure)		Item		
	<u>FILLING</u>				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
4	Backfilling to strip footings, bases etc	m3	33.66		
	Compaction of surfaces				
5	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	242.57		
	Prescribed density tests on filling				
6	"Modified AASTHO Density" test	No	4.83		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
7	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	230.07		
8	To bottoms and sides of trenches etc	m2	305.95		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)					
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
	SUPPLEMENTARY PREAMBLES					
	Cost of test					
	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)					
	<u>Formwork</u>					
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25Mpa/19mm Concrete					
1	Strip footings and Column Bases	m3	16.60			
2	Surface beds on waterproofing	m3	17.40			
3	Columns	m3	0.71			
4	Apron	m3	6.41			
	Carried Forward  Section No. 4  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
5	Roof Beam	m3	5.00		
	SMOOTH FORMWORK				
	Smooth formwork to soffits				
6	Roof Beam	m2	65.05		
	TEST CUBES				
7	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	4.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a power float				
8	Surface beds, slabs, etc	m2	174.00		
	Finishing top of surface bed smooth with a wood float				
9	Apron	m2	113.00		
	MOVEMENT JOINT				
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
10	Not exceeding 300mm high to edges of surface bed	m	140.17		
	Carried Forward Section No. 4 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
	10mm Construction joint between vertical concrete surfaces, debonded with Lime Wash or Bitumen, groove and sealant saw cut filled with Polysulphide sealant Durakol 25 or Similar approved with Polyethylene bond breaker backing tape				
11	Surface beds and Apron not exceeding 300mm thick	m	33.32		
	Saw cut joint with Mutlipoxy 1308				
12	Surface bed not exceeding 300mm thick	m	38.99		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
13	8mm diameter bars	t	0.45		
	High tensile reinforcement for structural concrete work				
14	8mm Diameter bars	t			
15	10mm Diameter bars	t	0.52		
16	12mm Diameter bars	t	0.41		
17	16mm Diameter bars	t	0.09		
	Fabric mesh reinforcement				
18	Type Ref 193 fabric reinforcement in concrete slabs etc.	m2	230.07		
19	Type Ref 100 fabric reinforcement on ceilings	m2	141.27		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.3 - MASONRY				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timorously to obtain uniformity in size and colour				
	FOUNDATION BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
1	Half brick walls	m2	14.70		
2	One brick walls	m2	181.70		
3	Columns	m3	0.94		
	SUPERSTRUCTURE BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
4	Half brick walls	m2	22.10		
5	One Brick Walls	m2	182.71		
6	One and a half brick Walls	m2			
7	One brick gable Walls	m2	29.51		
	Carried Forward			R	
	Section No. 4 Bill No. 3 MASONRY Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

	Brought Forward			R	
8	Half brick wall in beamfilling	m2	20.01		
9	Columns	m3	1.74		
	BRICKWORK SUNDRIES				
	2.5mm Brickwork Reinforcement				
10	75mm Wide built in horizontally	m	218.32		
11	150mm Wide built in horizontally	m	1 504.34		
	FACE BRICKWORK				
	Moroccan red blend travertine or similar approved face bricks pointed with flush horizontal and vertical joints				
12	Extra over brickwork for face brickwork in foundations (provisional)	m2	15.61		
13	Extra over brickwork for face brickwork	m2	114.03		
14	Extra over brickwork for brick-on-edge header course lintels 1 course(s) high, pointed on face	m	21.00		
	Brick-on-edge header coarse copings, sills etc of Moroccan red blend travertine or similar approved face bricks, pointed with recessed joints on all exposed faces				
15	220mm Wide sills set sloping and slightly projected	m	20.00		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 3 MASONRY Tshedimoso Elemental Estimate Rev02			R	
	Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.4 - WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)				
1	In walls	m2	58.78		
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape				
2	Under Surface bed	m2	187.94		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 4 WATERPROOFING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			K	

Item No		Quantity	Rate	Amount
110	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.5 - ROOF COVERING			
	SUPPLEMENTARY PREAMBLES			
	IBR ROOF COVERING			
	Guarantees			
	The contractor will be required to provide a written guarantee for the roof covering as follows:			
	IBR roof covering material - 10 years Workmanship - 10 years			
	Certificate for Galvanised Roof Sheeting			
	The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified			
	<b>Note:</b> Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	IBR PROFILE SHEETING			
	IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins			
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	232.93		
	Carried Forward		R	
	Section No. 4 Bill No. 5 ROOF COVERING			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward		R	
2	ROOF AND WALL INSULATION  Sisalation 405 Reflective foil underlay in accordance with SANS 1381-4 overlapped longitudinally by 100mm; on and including galvanised straining wire spaced at 383mm centres fixed parallel over purlins to manufacturer's instruction  Insulation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrently with roof covering with minimum 150mm stapled laps including galvanised straining wires at not exceeding 400mm centres and one-sided tape at edges where required (Layer 1) (LI)  m2	221.28		
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4 Bill No. 5 ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.6 - CARPENTRY AND JOINERY			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	Carried Forward		R	
	Section No. 4 Bill No. 6			
	CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	SUPPLEMENTARY PREAMBLES				
	Trusses are at maximum 1 200mm centres				
	Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins				
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	Sawn softwood trusses				
1	Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc	m2	232.93		
	Sundries				
2	30x1.6mm Galvanised steel straps built 600mm deep into brickwork	No	121.65		
3	Two Coats creosote on sawn timbers	m2	114.22		
4	Engineers Certificate		Item		
	EAVES, VERGES, ETC				
	Carried Forward  Section No. 4  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
l.	Medium density plain fibre-cement fascia's and barge boards				
5	Everite medium density plain ungrooved Nutec fascia boards (Code: 041-202), size 225x12mm, fixed to 76x50mm SAP timber tilter batten and 38x38mm SAP timber support battens between rafters twice screwed with 12x40mm countersunk brass screws at 900mm c/c to support battens with aluminium H-profile fascia joiner between boards and aluminium H-profile fascia corner joiners at board ends.	m	40.44		
	SKIRTINGS				
	Fine grained compresses woodpulp / cane purpose made				
6	76 x 19 mm Skirtings, nailed	m	140.17		
	DOORS				
	Masonite backing side hung doors				
7	Hardwood door 44 x 813 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	1.00		
8	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	No	4.00		
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
	SUPPLEMENTARY PREAMBLES				
	General				
	All units shall include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or varnish finishes, etc				
	Carried Forward  Section No. 4  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward	R	
	Prices are to include for all necessary filler pieces against walls etc		
	References		
	Carcasses - white melamine.		
	Doors and seen ends - petrol blue melamine with impact edging.		
	Counter tops - melawood in colour supamatt storm grey, square line.		
	Door / Drawer Handles - 196mm ROCO - square bar stainless steel handle."		
	Built in cupboards and Shelves		
9	As per specialist for the supply and installation of built in cupboards and shelves as indicated on Architectural Drawings	SUM	
	Carried Forward to Summary of Section No. 4	R	
	Section No. 4 Bill No. 6		
	CARPENTRY AND JOINERY		
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		

Item No		Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<u>Ceilings</u>				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
					_
	Carried Forward		R		
	Section No. 4 Bill No. 7				
	CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward	1		R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	141.27		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	1.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	98.56		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	141.27		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 7				
	CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)					
	BILL NO.8 - FLOOR COVERINGS, WALL LININGS, ETC					
	SUPPLEMENTARY PREAMBLES					
	<u>Fixing</u>					
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc					
	FLOOR COVERING					
	300 x 300 x 2mm semi flexible vinyl tiles					
1	On floors	m2	173.92			
	Carried Forward to Summary of Section No. 4			R		
	Section No. 4 Bill No. 8 FLOOR COVERINGS, WALL LININGS, ETC Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			, in		:

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.9 - IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	Proprietary items			
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items			
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered			
	On request returnable samples are to be provided to the principal agent for consideration			
	LOCKS			
	Manufactured by approved supplier			
1	1Pr. Duba One lever handles on plate No.	7.00		
2	Euro profile cylinder SASH Lock - Chrome Plated No.	7.00		
3	66mm Privacy cylinder - Nickle Plated No.	7.00		
	SUNDRIES			
	Manufactured by approved supplier			
4	Floor mounted door stop - Satin Chrome No.	7.00		
	<u>FURNITURE</u>			
	Carried Forward Section No. 4 Bill No. 9		R	
	IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
ļ	As per Architects Furniture Schedule Rev.00				
5	3 Tier Shelving Unit - 21mm Saligna: 900x300x1200mmH	No	1.00		
6	Round Table: Saligna top with 32mm square steel legs: 1200diametre x 750mmH	No	5.00		
7	Secondary Chair - Stackable steel frame, large orange polyprop seat:450mmH	No	20.00		
8	Upholstered Side Chair with Arms - Steel main frame, Upholstered seat & back, 450mmH	No	1.00		
9	Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H	No	1.00		
10	Bulletin Boards: 2400x1200mm: Carpet Pinning Board	No	1.00		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 9 IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

		Quantity	Rate	Amount	
SECTION 4 : BLOCK 3 MEDIA CENTRE					
BILL NO.10 - PLUMBING AND DRAINAGE					
SUPPLEMENTARY PREAMBLES					
Proprietary items					
Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items					
Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered					
On request returnable samples are to be provided to the principal agent for consideration					
BATHROOM FITTINGS					
Manufactured by Cobra or similar approved					
CERAMIC "RAPIDO" low level, open rim toilet pan with 5L 365mm width x 400mm height with fixing skrews to floor. (or equal approved) Code: RT020BA	No	2.00			
NDLOVU SHIRES low level front flush cistern white with concealed mounting bracket with heavy duty securing bolts, locally manufactured concealed tamper proof cistern lid screws; front flush chrome plated handle with built-in travel stop; side water inlet	No	2 00			
•	110	2.00			
universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT	No	2.00			
Carried Forward			R		_
Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					
	BILL NO.10 - PLUMBING AND DRAINAGE  SUPPLEMENTARY PREAMBLES  Proprietary items  Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items  Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered  On request returnable samples are to be provided to the principal agent for consideration  BATHROOM FITTINGS  Manufactured by Cobra or similar approved  CERAMIC "RAPIDO" low level, open rim toilet pan with 51. 365mm width x 400mm height with fixing skrews to floor. (or equal approved) Code: RT020BA  NDLOVU SHIRES low level front flush cistern white with concealed mounting bracket with heavy duty securing bolts, locally manufactured concealed tamper proof cistern lid screws; front flush chrome plated handle with built-in travel stop; side water inlet.  BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT  Carried Forward  Section No. 4  Bill No. 10  PLUMBING AND DRAINAGE  Tshedimoso Elemental Estimate Rev02	BILL NO.10 - PLUMBING AND DRAINAGE  SUPPLEMENTARY PREAMBLES  Proprietary items  Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items  Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered  On request returnable samples are to be provided to the principal agent for consideration  BATHROOM FITTINGS  Manufactured by Cobra or similar approved  CERAMIC "RAPIDO" low level, open rim toilet pan with \$1.365mm width x 400mm height with fixing skrews to floor. (or equal approved) Code: RT020BA  NDLOVU SHIRES low level front flush cistern white with concealed mounting bracket with heavy duty securing bolts, locally manufactured concealed tamper proof cistern lid screws; front flush chrome plated handle with built-in travel stop; side water inlet.  BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT  Carried Forward  Section No. 4  BIII No. 10  PLUMBING AND DRAINAGE  Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE  BILL NO.10 - PLUMBING AND DRAINAGE  SUPPLEMENTARY PREAMBLES  Proprietary items  Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items  Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered  On request returnable samples are to be provided to the principal agent for consideration  BATHROOM FITTINGS  Manufactured by Cobra or similar approved  CERAMIC "RAPIDO" low level, open rim toilet pan with 5L 365mm width x 400mm height with fixing skrews to floor. (or equal approved) Code: RT020BA  NDLOVU SHIRES low level front flush cistern white with concealed mounting bracket with heavy duty securing bolts, locally manufactured concealed tamper proof cistern lid screws; front flush chrome plated handle with built-in travel stop; side water inlet.  BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT  Carried Forward  Section No. 4  Bill No. 10  PLUMBING AND DRAINAGE  Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE  BILL NO.10 - PLUMBING AND DRAINAGE  SUPPLEMENTARY PREAMBLES  Proprietary items  Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items  Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered  On request returnable samples are to be provided to the principal agent for consideration  BATHROOM FITTINGS  Manufactured by Cobra or similar approved  CERAMIC "RAPIDO" low level, open rim toilet pan with \$L 385mm width x 400mm height with fixing skrews to floor. (or equal approved) Code: RT020BA  NDLOVU SHIRES low level front flush cistern white with concealed mounting bracket with heavy duty securing bolts, locally manufactured concealed tamper proof cistern lid screws; front flush chrome-plated handle with built-in travel stop; side water inlet.  No 2.00  BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT  Carried Forward  R  Section No. 4  Bill No. 10  PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE  BILL NO.10 - PLUMBING AND DRAINAGE  SUPPLEMENTARY PREAMBLES  Proprietary Items  Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items  Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered  On request returnable samples are to be provided to the principal agent for consideration  BATHROOM FITTINGS  Manufactured by Cobra or similar approved  CERAMIC "RAPIDO" low level, open rim toilet pan with 5L 365mm width x 400mm height with fixing skrews to foor, (or equal approved) Code: RT020BA  NDLOVU SHIRES low level front flush cistern white with concealed mounting bracket with heavy duty securing bolts, locally manufactured concealed tamper proof cistern ind screws; front flush chrome-plated handle with built-in travel stor; side water inlet.  BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT  Carried Forward  R  Section No. 4  BII No. 10  PLUMBING AND DRAINAGE  Tshedimoso Elemental Estimate Rev02

	Brought Forward			R	
4	COBRA screw-down angle regulating valve for flexible tubes chrome plated. Includes 1/2"(15mm) male inlet and 1/2"(15mm) female outlet, and sliding wall flange. (or equal approved) Code: 232-10	No	2.00		
5	COBRA 350mm long; 1/2"(15mm) x 1/2" (15mm) Female to Female Flexible Connector. (or equal approved) Code: C-15/350	No	2.00		
6	COBRA "WELCOME" medium wall hung basin. (430 x 390mm) 1 x punched tap hole in centre of basin. Includes wall fixing set. (or equal approved) Code: CWLBAWH2-6DT01	No	2.00		
7	COBRA "WELCOME" Round semi-pedestal. 270mm wide x 308mm high. Wall fixing set & installation manual included. (or equal approved) Code: CWLPERD2-6DT01	No	2.00		
8	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	2.00		
9	COBRA basin type bottle trap with 75mm deep seal and telescopic waste connection pipe. 1¼ female inletconnection; 1½ male outlet connection. Brass body, chrome plated. (or equal approved) Code: 350/N	No	2.00		
10	GROHE EUROECO Cosmopolitan T Self Closing Pillar Tap. Grohe ECOJOY 5.7lt/min flow limiter with 3 adjustable flow times, short, medium and long. Approx 7; 15; 30 second (Pressure dependant) minimum recommended operation pressure 100kPa. (or equal approved) Code: G-36265000	No	2.00		
11	FRANKE RODAN towel roll holder (or equal approved) Code: RODX672	No	2.00		
12	FRANKE RODAN soap dispenser (or equal approved) Code: RODX619	No	1.00		
13	FRANKE STRATOS paper towel dispenser (or equal approved) Code: STRX637	No	1.00		
	Carried Forward Section No. 4 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
14	FRANKE RODAN waste bin (or equal approved) Code: RODX605	No	1.00		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE				
	BILL NO.10 - METALWORKS				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	DOORS				
	Fire Doors				
	Fire doors are to be in accordance with SANS 1253				
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
	Section No. 4 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R		

	Brought Forward			R	
	General				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc  Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	PRESSED STEEL DOOR FRAMES				
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 220mm wall				
1	Frame for door 813 x 2032mm high door	No	1.00		
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 110mm wall				
2	Frame for door 813 x 2032mm high door	No	6.00		
	ALUMINIUM WINDOWS AND DOORS				
	Carried Forward  Section No. 4  Bill No. 11  METALWORKS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
3	900x900mm Window (W06)	No	19.00		
4	900x600mm Window (W08)	No	3.00		
	STEEL GATES, SCREENS, ETC				
	Welded screens and gates				
5	Gate 5	No	1.00		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.11 - PLASTERING			
	SCREEDS			
	Screeds wood floated, on concrete			
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding	2 173.92		
	INTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
2	On walls m	269.59		
3	On narrow widths m	10.00		
	EXTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
4	On walls m	101.29		
	Cement plaster steel trowelled on concrete			
5	Plaster to roof beam m	65.05		
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4 Bill No. 12			
	PLASTERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Ī	Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.12 - TILING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" ("Ceresit Tylon"?) range of products as recommended by the manufacturer of the tiles				
	WALL TILING				
	152x152x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors				
1	On walls	m	5.17		
	SUNDRIES				
	Anodised aluminium corner protectors, stair nosing, expansion joint strips, etc				
2	10mm Straight edge corner protectors	m	1.83		
3	15mm Straight edge weather strip	m	1.00		
4	T-Piece/Expansion	m	10.00		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 13 TILING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantit	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE			
	BILL NO.14 - GLAZING			
	SECTION 2 : BLOCK 1 ADMIN			
	BILL NO.14 - GLAZING			
	SUPPLEMENTARY PREAMBLES			
	Float glass			
	The term "float glass" is used for monolithic glass			
	<u>MIRRORS</u>			
	Silvered floated glass copper backed mirrors with polished edges, fixed to wall with double sided adhesive tape and silicone			
1	Mirror 450 x 600mm high	No	2	
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4 Bill No. 14			
	GLAZING Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

		Quantity	Rate	Amount	
SECTION 4 : BLOCK 3 MEDIA CENTRE)					
BILL NO.13 - PAINTWORK					
SUPPLEMENTARY PREAMBLES					
PAINT SPECIFICATIONS					
All painting shall be done in accordance with Architect specifications unless otherwise described					
COLOURS					
Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
ON INTERNAL FLOATED PLASTER SURFACES					
One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
Walls	m2	279.18			
ON EXTERNAL FLOATED PLASTER SURFACES					
One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
Walls and beams	m2	166.33			
ON FIBRE-CEMENT SURFACES					
One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	32.63			
Carried Forward			R		
Section No. 4 Bill No. 15 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					
	BILL NO.13 - PAINTWORK  SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  Carried Forward  Section No. 4  Bill No. 15  PAINTWORK  Tshedimoso Elemental Estimate Rev02	BILL NO.13 - PAINTWORK  SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  m2  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  m2  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  m2  Carried Forward  Section No. 4  Bill No. 15  PAINTWORK Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE)  BILL NO.13 - PAINTWORK SUPPLEMENTARY PREAMBLES PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  ON EXTERNAL FLOATED PLASTER SURFACES One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  m2 166.33  ON FIBRE-CEMENT SURFACES One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  Carried Forward  Section No. 4  Bill No. 15 PAINTWORK Tshedimoso Elemental Estimate Rev02	SECTION 4: BLOCK 3 MEDIA CENTRE)  BILL NO.13 - PAINTWORK SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  Malls  Malls	SECTION 4 : BLOCK 3 MEDIA CENTRE)  BILL NO.13 - PAINTWORK  SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  Carried Forward  R  Section No. 4  Bill No. 15  PAINTYNORK  TShedimoso Elemental Estimate Rev02

	Brought Forward			R	
4	Ceilings and cornices	m2	141.27		
	ON METAL SURFACES				
	One coat metal primer and two coats Plascon Velvegro, on steel				
5	Door frames	m2	6.60		
6	Gates	m2	4.00		
	ON WOOD SURFACES				
	One coat primer and two coats premium quality polyurethane enamel paint				
7	External door	m2	3.31		
	Three coats superior quality clear matt varnish				
8	Internal Door	m2	19.83		
					$\vdash$
	Carried Forward to Summary of Section No. 4			R	$\downarrow$
	Section No. 4 Bill No. 15				
	PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	SECTION SUMMARY - SECTION 4 : BLOCK 3 MEDIA CENTRE				
Bill No		Page No		Amount	
1	EARTHWORKS (PROVISIONAL)	69			
2	CONCRETE, FORMWORK AND REINFORCEMENT	72			
3	MASONRY	74			
4	WATERPROOFING	75			
5	ROOF COVERING	77			
6	CARPENTRY AND JOINERY	81			
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	83			
8	FLOOR COVERINGS, WALL LININGS, ETC	84			
9	IRONMONGERY	86			
10	PLUMBING AND DRAINAGE	89			
11	METALWORKS	92			
12	PLASTERING	93			
13	TILING	94			
14	GLAZING	95			
15	PAINTWORK	97			
					—
	Carried to Final Summary Section No. 4		R		_
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
	<b></b>				
		1	1	i I	

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.1 - EARTHWORKS (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.			
	Carting away of excavated material			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site			
	Excavation			
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. "Soft rock" and "hard rock" shall be as defined in "Earthworks"			
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill			
	EXCAVATIONS			
	Excavations in earth not exceeding 2m deep			
1	Foundations	3 68.92		
	Extra over all excavations for carting away			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor m	3 38.12		
	Carried Forward  Section No. 5  Bill No. 1  EARTHWORKS (PROVISIONAL)		R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)					
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
	SUPPLEMENTARY PREAMBLES					
	Cost of test					
	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)					
	<u>Formwork</u>					
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25Mpa/19mm Concrete					
1	Strip footings and Column Bases	m3	13.54			
2	Surface beds on waterproofing	m3	11.55			
3	Columns	m3	0.29			
4	Apron	m3	6.03			
	Carried Forward  Section No. 5  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
5	Roof Beam	m3	4.00		
	SMOOTH FORMWORK				
	Smooth formwork to soffits				
6	Roof Beam	m2	51.88		
	TEST CUBES				
7	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	4.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a power float				
8	Surface beds, slabs, etc	m2	116.00		
	Finishing top of surface bed smooth with a wood float				
9	Apron	m2	106.00		
	MOVEMENT JOINT				
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
10	Not exceeding 300mm high to edges of surface bed	m	117.33		
	Carried Forward Section No. 5 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
	10mm Construction joint between vertical concrete surfaces, debonded with Lime Wash or Bitumen, groove and sealant saw cut filled with Polysulphide sealant Durakol 25 or Similar approved with Polyethylene bond breaker backing tape				
11	Surface beds and Apron not exceeding 300mm thick	m	20.44		
	Saw cut joint with Mutlipoxy 1308				
12	Surface bed not exceeding 300mm thick	m	29.13		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
13	8mm diameter bars	t	0.14		
	High tensile reinforcement for structural concrete work				
14	8mm Diameter bars	t			
15	10mm Diameter bars	t	0.48		
16	12mm Diameter bars	t	0.30		
	Fabric mesh reinforcement				
17	Type Ref 193 fabric reinforcement in concrete slabs etc.	m2	168.18		
18	Type Ref 100 fabric reinforcement on ceilings	m2	91.51		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 Bill No. 2				_
	CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate  Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.3 - MASONRY				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timorously to obtain uniformity in size and colour				
	FOUNDATION BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
1	Half brick walls	m2	29.32		
2	One brick walls	m2	128.32		
3	Columns	m3	0.67		
	SUPERSTRUCTURE BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
4	Half brick walls	m2	50.58		
5	One Brick Walls	m2	106.62		
6	One brick gable Walls	m2	35.16		
7	Half brick wall in beamfilling	m2	9.76		
	Carried Forward Section No. 5			R	
	Bill No. 3 MASONRY				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
8	Columns	m3	1.25		
	BRICKWORK SUNDRIES				
	2.5mm Brickwork Reinforcement				
9	75mm Wide built in horizontally	m	441.91		
10	150mm Wide built in horizontally	m	982.16		
	FACE BRICKWORK				
	Moroccan red blend travertine or similar approved face bricks pointed with flush horizontal and vertical joints				
11	Extra over brickwork for face brickwork in foundations (provisional)	m2	11.53		
12	Extra over brickwork for face brickwork	m2	77.91		
13	Extra over brickwork for brick-on-edge header course lintels 1 course(s) high, pointed on face	m	9.00		
	Brick-on-edge header coarse copings, sills etc of Moroccan red blend travertine or similar approved face bricks, pointed with recessed joints on all exposed faces				
14	220mm Wide sills set sloping and slightly projected	m	12.00		
					-
	Carried Forward to Summary of Section No. 5 Section No. 5			R	=
	Bill No. 3 MASONRY				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.4 - WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)				
1	In walls	m2	40.80		
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape				
2	Under Surface bed	m2	127.16		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 Bill No. 4			K	
	WATERPROOFING Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.5 - ROOF COVERING			
	SUPPLEMENTARY PREAMBLES			
	IBR ROOF COVERING			
	<u>Guarantees</u>			
	The contractor will be required to provide a written guarantee for the roof covering as follows:			
	IBR roof covering material - 10 years Workmanship - 10 years			
	Certificate for Galvanised Roof Sheeting			
	The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified			
	<b>Note:</b> Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	IBR PROFILE SHEETING			
	IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins			
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	153.86		
	Carried Forward		R	
	Section No. 5 Bill No. 5			
	ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
2	ROOF AND WALL INSULATION  Sisalation 405 Reflective foil underlay in accordance with SANS 1381-4 overlapped longitudinally by 100mm; on and including galvanised straining wire spaced at 383mm centres fixed parallel over purlins to manufacturer's instruction  Insulation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrently with roof covering with minimum 150mm stapled laps including galvanised straining wires at not exceeding 400mm centres and one-sided tape at edges where required (Layer 1) (LI)	m2	146.17	R	
	Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 5 ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.6 - CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	Carried Forward		R		_
	Section No. 5 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	1
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	SUPPLEMENTARY PREAMBLES				
	Trusses are at maximum 1 200mm centres				
	Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins				
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	Sawn softwood trusses				
1	Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc	m2	153.86		
	Sundries				
2	30x1.6mm Galvanised steel straps built 600mm deep into brickwork	No	61.39		
3	Two Coats creosote on sawn timbers	m2	58.79		
4	Engineers Certificate		Item		
	EAVES, VERGES, ETC				
	Carried Forward Section No. 5 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
l.	Medium density plain fibre-cement fascia's and barge boards				
5	Everite medium density plain ungrooved Nutec fascia boards (Code: 041-202), size 225x12mm, fixed to 76x50mm SAP timber tilter batten and 38x38mm SAP timber support battens between rafters twice screwed with 12x40mm countersunk brass screws at 900mm c/c to support battens with aluminium H-profile fascia joiner between boards and aluminium H-profile fascia corner joiners at board ends.	m	27.22		
	SKIRTINGS				
	Fine grained compresses woodpulp / cane purpose made				
6	76 x 19 mm Skirtings, nailed	m	117.33		
	DOORS				
	Masonite backing side hung doors				
7	Hardwood door 44 x 813 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	2.00		
8	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	No	2.00		
9	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	No	6.00		
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
	SUPPLEMENTARY PREAMBLES				
	Carried Forward Section No. 5 Bill No. 6 CARPENTRY AND JOINERY			R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward	R	
	<u>General</u>		
	All units shall include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or varnish finishes, etc		
	Prices are to include for all necessary filler pieces against walls etc		
	References		
	Carcasses - white melamine.		
	Doors and seen ends - petrol blue melamine with impact edging.		
	Counter tops - melawood in colour supamatt storm grey, square line.		
	Door / Drawer Handles - 196mm ROCO - square bar stainless steel handle."		
	Built in cupboards and Shelves		
10	As per specialist for the supply and installation of built in cupboards and shelves as indicated on Architectural Drawings	SUM	
	Corried Femulard to Summary of Section No. 5	R	
	Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 6		_
	CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere			
	<u>Ceilings</u>			
	Unless otherwise described ceilings shall be deemed to be horizontal			
	NAILED-UP CEILINGS			
	SUPPLEMENTARY PREAMBLES			
	<u>Openings</u>			
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc			
	Carried Forward		R	
	Section No. 5 Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	91.51		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	1.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	87.14		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	91.51		
	Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)			
	BILL NO.8 - FLOOR COVERINGS, WALL LININGS, ETC			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	FLOOR COVERING			
	300 x 300 x 2mm semi flexible vinyl tiles			
1	On floors m2	115.42		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 Bill No. 8 FLOOR COVERINGS, WALL LININGS, ETC Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.9 - IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	LOCKS				
	Manufactured by approved supplier				
1	1Pr. Duba One lever handles on plate	No	10.00		
2	Euro profile cylinder SASH Lock - Chrome Plated	No	10.00		
3	66mm Privacy cylinder - Nickle Plated	No	10.00		
	SUNDRIES				
	Manufactured by approved supplier				
4	Floor mounted door stop - Satin Chrome	No	10.00		
5	Coat Hook	No	4.00		
6	160x160x2mm Push Plate	No	8.00		
	Carried Forward  Section No. 5  Bill No. 9  IRONMONGERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

Brought Forward			R	
<u>FURNITURE</u>				
As per Architects Furniture Schedule Rev.00				
Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H	No	1.00		
Economy Upholstered Side Chair - Steel main frame - blue material 450mmH	No	2.00		
Grade R Table: Steel frame, Saligna top: 1800x700x500mmH	No	3.00		
Grade R Chair - Stackable steel frame, small blue polyprop seat: 325mmH	No	20.00		
Bulletin Boards: 2400x1200mm: Carpet Pinning Board	No	1.00		
Single Sick Bed: Steel, with mattress: 1905 X 760mm	No	1.00		
Green Chalkboards: 1200x1500mm: NON-MAGNETIC	No	2.00		
Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 9 IRONMONGERY Tshedimoso Elemental Estimate Rev02			R	
	As per Architects Furniture Schedule Rev.00  Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H  Economy Upholstered Side Chair - Steel main frame - blue material 450mmH  Grade R Table: Steel frame, Saligna top: 1800x700x500mmH  Grade R Chair - Stackable steel frame, small blue polyprop seat: 325mmH  Bulletin Boards: 2400x1200mm: Carpet Pinning Board  Single Sick Bed: Steel, with mattress: 1905 X 760mm  Green Chalkboards: 1200x1500mm: NON-MAGNETIC	As per Architects Furniture Schedule Rev.00  Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H No  Economy Upholstered Side Chair - Steel main frame - blue material 450mmH No  Grade R Table: Steel frame, Saligna top: 1800x700x500mmH No  Grade R Chair - Stackable steel frame, small blue polyprop seat: 325mmH No  Bulletin Boards: 2400x1200mm: Carpet Pinning Board No  Single Sick Bed: Steel, with mattress: 1905 X 760mm No  Green Chalkboards: 1200x1500mm: NON-MAGNETIC No  Carried Forward to Summary of Section No. 5  Section No. 5  Bill No. 9	As per Architects Furniture Schedule Rev.00  Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H No 1.00  Economy Upholstered Side Chair - Steel main frame - blue material 450mmH No 2.00  Grade R Table: Steel frame, Saligna top: 1800x700x500mmH No 3.00  Grade R Chair - Stackable steel frame, small blue polyprop seat: 325mmH No 20.00  Bulletin Boards: 2400x1200mm: Carpet Pinning Board No 1.00  Single Sick Bed: Steel, with mattress: 1905 X 760mm No 1.00  Green Chalkboards: 1200x1500mm: NON-MAGNETIC No 2.00  Carried Forward to Summary of Section No. 5  Section No. 5  Bill No. 9	As per Architects Furniture Schedule Rev.00  Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H No 1.00  Economy Upholstered Side Chair - Steel main frame - blue material 450mmH No 3.00  Grade R Table: Steel frame, Saligna top: 1800x700x500mmH No 3.00  Grade R Chair - Stackable steel frame, small blue polyprop seat: 325mmH No 20.00  Bulletin Boards: 2400x1200mm: Carpet Pinning Board No 1.00  Single Sick Bed: Steel, with mattress: 1905 X 760mm No 1.00  Green Chalkboards: 1200x1500mm: NON-MAGNETIC No 2.00  Carried Forward to Summary of Section No. 5  Section No. 5  Section No. 5  Section No. 5

Item No			Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE	l			
	BILL NO.10 - PLUMBING AND DRAINAGE				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	BATHROOM FITTINGS				
	Manufactured by Cobra or similar approved				
1	FRANKE Oval A Stainless Steel Wash Hand Basin. Size 304 (18/10) polished stainless steel, 1.2mm gauge. Wall supplied. (or equal approved) Code: 2520029		0.00		
		No	3.00		
2	COBRA "Star" Pillar Open ended Tap, brass chrome plate indices, 3/4" BSP male inlet, flanged backnut. In Accordan DZR Brass, JASWIC listed. (or equal approved) Code: 211	No	3.00		
		INO	5.00		
3	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	3.00		
	Carried Forward			R	
	Section No. 5 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

R	R	
	0	
	0	
	0	
	0	
	0	
	0	
	0	
	0	
	0	
	0	
R	R	
	0	R

	Brought Forward			R	
14	COBRA "WELCOME" Round semi-pedestal. 270mm wide x 308mm high. Wall fixing set & installation manual included. (or equal approved) Code: CWLPERD2-6DT01	No	1.00		
15	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	1.00		
16	COBRA basin type bottle trap with 75mm deep seal and telescopic waste connection pipe. 1¼ female inletconnection; 1½ male outlet connection. Brass body, chrome plated. (or equal approved) Code: 350/N	No	1.00		
17	COBRA Elbow actionpillar tap. With 1/4 turn ceramic disc blue indice for cold water application. 1/2"(15mm)BSP mal approved) Code: FEAPILEA-5JT01	No	1.00		
18	NEOPERL PCW-02 washer regulator @ 2lt/min; flexible pressure compensating. Fits 1/2" bib and pillar taps. (or eq	No	1.00		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
	Tange & Lionichia. Lonniaco				

Item No		Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE			
	BILL NO.10 - METALWORKS			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	DOORS			
	Fire Doors			
	Fire doors are to be in accordance with SANS 1253			
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC			
	Carried Forward  Section No. 5  Bill No. 11  METALWORKS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate		R	

	Brought Forward			R	
	<u>General</u>				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc				
	Preambles for Trades before pricing this bill				
	PRESSED STEEL DOOR FRAMES  1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 220mm wall				
1	Frame for door 813 x 2032mm high door	No	2.00		
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 110mm wall				
2	Frame for door 813 x 2032mm high door	No	8.00		
	ALUMINIUM WINDOWS AND DOORS				
	Carried Forward  Section No. 5  Bill No. 11  METALWORKS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Matt light grey powder coated windows Glazed with GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
3	900x1200mm Window (W05)	No	8.00		
	Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
4	600x900mm Window (W04)	No	3.00		
5	900x900mm Window (W06)	No	3.00		
	STEEL GATES, SCREENS, ETC  Welded screens and gates				
6	Gate 5	No	2.00		
	Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		C	Quantity	Rate	Amount
	SECTION 4 : BLOCK 3 MEDIA CENTRE)				
	BILL NO.11 - PLASTERING				
	SCREEDS				
	Screeds wood floated, on concrete				
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding	ո2	115.42		
	INTERNAL PLASTER				
	Cement plaster steel trowelled on brickwork				
2	On walls	12	212.85		
3	On narrow widths	12	9.00		
	EXTERNAL PLASTER				
	Cement plaster steel trowelled on brickwork				
4	On walls	12	105.59		
	Cement plaster steel trowelled on concrete				
5	Plaster to roof beam n	12	51.88		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 Bill No. 12 PLASTERING				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE)					
	BILL NO.12 - TILING					
	SUPPLEMENTARY PREAMBLES					
	<u>Fixing</u>					
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding					
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat					
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" ("Ceresit Tylon"?) range of products as recommended by the manufacturer of the tiles					
	WALL TILING					
	152x152x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors					
1	On walls	m	2.01			
	SUNDRIES					
	Anodised aluminium corner protectors, stair nosing, expansion joint strips, etc					
2	10mm Straight edge corner protectors	m	4.56			
3	15mm Straight edge weather strip	m	2.00			
4	T-Piece/Expansion	m	10.00			
	Coming Forward to Common of Continu No. 5					_
	Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 13 TILING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		=

Item No			Quantity	Rate	Amount	
	SECTION 4 : BLOCK 3 MEDIA CENTRE					
	BILL NO.14 - GLAZING					
	SECTION 2 : BLOCK 1 ADMIN					
	BILL NO.14 - GLAZING					
	SUPPLEMENTARY PREAMBLES					
	Float glass					
	The term "float glass" is used for monolithic glass					
	MIRRORS					
	Silvered floated glass copper backed mirrors with polished edges, fixed to wall with double sided adhesive tape and silicone					
1	Mirror 450 x 600mm high	No	5			
	Carried Forward to Summary of Section No. 5			R		_
	Section No. 5 Bill No. 14					=
	GLAZING Tshedimoso Elemental Estimate Rev02					
	Stage 3 - Elemental Estimate					

		Quantity	Rate	Amount	
SECTION 4 : BLOCK 3 MEDIA CENTRE)					
BILL NO.13 - PAINTWORK					
SUPPLEMENTARY PREAMBLES					
PAINT SPECIFICATIONS					
All painting shall be done in accordance with Architect specifications unless otherwise described					
COLOURS					
Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
ON INTERNAL FLOATED PLASTER SURFACES					
One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
Walls	m2	220.87			
ON EXTERNAL FLOATED PLASTER SURFACES					
One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
Walls and beams	m2	157.46			
ON FIBRE-CEMENT SURFACES					
One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	13.89			
Carried Forward			R		
Section No. 5 Bill No. 15 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					
	BILL NO.13 - PAINTWORK  SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  Carried Forward  Section No. 5  BIII No. 15  PAINTWORK Tshedimoso Elemental Estimate Rev02	BILL NO.13 - PAINTWORK  SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  m2  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  m2  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  m2  Carried Forward  Section No. 5  Bill No. 15  PAINTWORK Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE)  BILL NO.13 - PAINTWORK SUPPLEMENTARY PREAMBLES PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  m2 220.87  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  m2 157.46  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  Carried Forward  Section No. 5  Bill No. 15  PAINTWORK Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE)  BILL NO.13 - PAINTWORK SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  m2  220.87  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  m2  157.46  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and external use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  m2  13.89  Carried Forward  R  Section No. 5  Bill No. 15  PAINTWORK  Tshedimoso Elemental Estimate Rev02	SECTION 4 : BLOCK 3 MEDIA CENTRE)  BILL NO.13 - PAINTWORK  SUPPLEMENTARY PREAMBLES  PAINT SPECIFICATIONS  All painting shall be done in accordance with Architect specifications unless otherwise described  COLOURS  Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091  ON INTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls  m2  220.87  ON EXTERNAL FLOATED PLASTER SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Walls and beams  m2  157.46  ON FIBRE-CEMENT SURFACES  One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use  Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips  Carried Forward  R  Section No. 5  Bill No. 15  PAINTWORK  Tshedimoso Elemental Estimate Rev02

	Brought Forward			R	
4	Ceilings and cornices	m2	91.51		
	ON METAL SURFACES				
	One coat metal primer and two coats Plascon Velvegro, on steel				
5	Door frames	m2	9.42		
6	Gates	m2	7.00		
	ON WOOD SURFACES				
	One coat primer and two coats premium quality polyurethane enamel paint				
7	External door	m2	6.61		
	Three coats superior quality clear matt varnish				
8	Internal Door	m2	26.44		
	Carried Forward to Summary of Section No. 5 Section No. 5			R	
	Bill No. 15 PAINTWORK				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

SECTION SUMMARY - SECTION 5: BLOCK 4 GRADE R CLASSR			
	Page No		Amount
EARTHWORKS (PROVISIONAL)	100		
CONCRETE, FORMWORK AND REINFORCEMENT	103		
MASONRY	105		
WATERPROOFING	106		
ROOF COVERING	108		
CARPENTRY AND JOINERY	112		
CEILINGS, PARTITIONS AND ACCESS FLOORING	114		
FLOOR COVERINGS, WALL LININGS, ETC	115		
IRONMONGERY	117		
PLUMBING AND DRAINAGE	120		
METALWORKS	123		
PLASTERING	124		
TILING	125		
GLAZING	126		
PAINTWORK	128		
Carried to Final Summary		R	
Section No. 5 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			
-			
	EARTHWORKS (PROVISIONAL)  CONCRETE, FORMWORK AND REINFORCEMENT  MASONRY  WATERPROOFING  ROOF COVERING  CARPENTRY AND JOINERY  CEILINGS, PARTITIONS AND ACCESS FLOORING  FLOOR COVERINGS, WALL LININGS, ETC  IRONMONGERY  PLUMBING AND DRAINAGE  METALWORKS  PLASTERING  TILING  GLAZING  PAINTWORK   Carried to Final Summary  Section No. 5  Tshedimoso Elemental Estimate Rev02	EARTHWORKS (PROVISIONAL)  CONCRETE, FORMWORK AND REINFORCEMENT  MASONRY  WATERPROOFING  ROOF COVERING  CARPENTRY AND JOINERY  CEILINGS, PARTITIONS AND ACCESS FLOORING  FLOOR COVERINGS, WALL LININGS, ETC  IRONMONGERY  PLUMBING AND DRAINAGE  METALWORKS  PLASTERING  TILING  GLAZING  PAINTWORK   Carried to Final Summary  Section No. 5  Tshedimoso Elemental Estimate Rev02	EARTHWORKS (PROVISIONAL)  EARTHWORKS (PROVISIONAL)  CONCRETE, FORMWORK AND REINFORCEMENT  MASONRY  WATERPROOFING  ROOF COVERING  CARPENTRY AND JOINERY  CEILINGS, PARTITIONS AND ACCESS FLOORING  FLOOR COVERINGS, WALL LININGS, ETC  IRONMONGERY  PLUMBING AND DRAINAGE  METALWORKS  PLASTERING  TILING  GLAZING  PAINTWORK  128  Carried to Final Summary  R  Section No. 5  Tshedimoso Elemental Estimate Rev02

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.1 - ALTERATIONS			
	SUPPLEMENTARY PREAMBLES			
	<u>View site</u>			
	Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	<u>General</u>			
	The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent			
	Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent			
	Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately			
	Carried Forward		R	
	Section No. 6 Bill No. 1			
	ALTERATIONS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward	Ī		R	
	Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc	1			
	Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing				
	With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork				
	Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary				
	The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)				
	REMOVAL OF EXISTING WORK				
	Breaking up and removing reinforced concrete, including cutting off and removing reinforcement				
1	85mm Thick surface beds	m2	1.00		
	Breaking down and removing brickwork etc				
2	Half brick walls	m2	12.00		
3	One brick walls	m2	4.00		
					_
	Carried Forward  Section No. 6  Bill No. 1  ALTERATIONS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Taking out and removing doors, windows, etc, including thresholds, sills, etc to be demolished (building up openings (if required) and making good finishes elsewhere)				
4	Timber single door only not exceeding 2,5m <sup>2</sup>	No	8.00		
5	Timber single door and steel frame not exceeding 2,5m²	No	3.00		
6	Glazed steel window not exceeding 2,5m²	No	14.00		
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
7	Gypsum plasterboard ceilings, including cornices, timber brandering, etc	m2	46.88		
	Taking out and removing ironmongery				
8	Towel rail not exceeding 1000mm long from wall	No	3.00		
9	Toilet paper holder from wall	No	1.00		
10	Soap Dispenser	No	3.00		
	Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc				
11	Tiles to floors	m2	47.00		
12	Tiles to walls	m2	3.00		
13	Tile skirtings 100mm high	m	58		
14	Tiles on concrete vanity slabs	m2	4		
15	Taking out and removing piping, sanitary fittings, etc, including cutting off as necessary, disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)  Vitreous china wash hand basin, including short lengths of piping, etc	No	1.00		
	or piping, etc		1.00		
	Carried Forward			R	
	Section No. 6 Bill No. 1				
	ALTERATIONS Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

	Brought Forward			R	
16	Vitreous china WC pan with cistern, including short lengths of piping, etc	No	1.00		
17	Vitreous china wall hung urinal with flush valve, including short lengths of piping, etc.	No	1.00		
	Taking out/off and removing glass and mirrors				
18	Glass from steel windows, including cleaning out rebates and preparing for new glass	m2	7		
19	Mirror 600 x 450mm high from wall including making good white glazed tiles	No	3		
	BUILDING UP OPENINGS				
	Brickwork in face bricks ( same as existing) in class II mortar in building up openings, pointed with recessed horizontal and vertical joints, including bonding new to existing and making good cement				
20	Half brick walls	m2	12		
21	One brick walls	m2	8		
	Comind Forward to Commence of Confirm No. 2			5	_
	Carried Forward to Summary of Section No. 6 Section No. 6			R	<del> </del>
	Bill No. 1 ALTERATIONS				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount	
1	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS	•				
	BILL NO.2 - EARTHWORKS (PROVISIONAL)					
	SUPPLEMENTARY PREAMBLES					
	Nature of ground					
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.					
	Carting away of excavated material					
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site					
	Excavation					
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. " Soft rock" and "hard rock" shall be as defined in "Earthworks"					
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill					
	EXCAVATIONS					
	Excavations in earth not exceeding 2m deep					
1	Foundations	m3	1.55			
	Carried Forward			R		_
	Section No. 6 Bill No. 2 EARTHWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			·		

	Brought Forward			R	
	FILLING				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
2	Backfilling to strip footings, bases etc	m3	0.86		
	Compaction of surfaces				
3	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	1.29		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
4	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	0.56		
5	To bottoms and sides of trenches etc	m2	5.71		
	Carried Forward to Summary of Section No. 6 Section No. 6 Bill No. 2 EARTHWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

		Quantity	Rate	Amount
SECTION 6 : EXISTING ABLUTIONS ALTERATIONS				
BILL NO.3 - CONCRETE, FORMWORK AND REINFORCEMENT				
SUPPLEMENTARY PREAMBLES				
Cost of test				
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)				
<u>Formwork</u>				
Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse				
REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
25Mpa/19mm Concrete				
Strip footings and Column Bases	m3	0.30		
Surface beds on waterproofing	m3	0.47		
Carried Forward  Section No. 6  Bill No. 3  CONCRETE, FORMWORK & REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	
	BILL NO.3 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases  Surface beds on waterproofing  Carried Forward  Section No. 6  Bill No. 3  CONCRETE, FORMWORK & REINFORCEMENT  Tshedimoso Elemental Estimate Rev02	BILL NO.3 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases m3  Surface beds on waterproofing m3  Carried Forward  Section No. 6  Bill No. 3  CONCRETE, FORMWORK & REINFORCEMENT  Tshedimoso Elemental Estimate Rev02	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS  BILL NO.3 - CONCRETE, FORMWORK AND REINFORCEMENT  SUPPLEMENTARY PREAMBLES  Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases m3 0.30  Surface beds on waterproofing m3 0.47  Carried Forward  Section No. 6  Bill No. 3  CONCRETE, FORMWORK & REINFORCEMENT Tshedimoso Elemental Estimate Rev02	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS  BILL NO.3 - CONCRETE, FORMWORK AND REINFORCEMENT SUPPLEMENTARY PREAMBLES Cost of test  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)  Formwork  Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse  REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES  25Mpa/19mm Concrete  Strip footings and Column Bases m3 0.30  Surface beds on waterproofing m3 0.47  Carried Forward  R  Section No. 6 Bill No. 3  CONCRETE, FORMWORK & REINFORCEMENT Tshedimoso Elemental Estimate Rev02

	Brought Forward			R	
	TEST CUBES		i-		
3	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	1.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a power float				
4	Surface beds, slabs, etc	m2	1.00		
	Finishing top of surface bed smooth with a wood float				
5	Apron	m2			
	MOVEMENT JOINT				
	20mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
6	Not exceeding 300mm high to edges of surface bed	m	0.60		
	REINFORCEMENT				
	High tensile reinforcement for structural concrete work				
7	8mm Diameter bars	t			
	Fabric mesh reinforcement				
8	Type Ref 193 fabric reinforcement in concrete slabs etc.	m2	0.55		
	Carried Forward to Summary of Section No. 6 Section No. 6 Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT Tshedimoso Elemental Estimate Rev02			R	
	Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.4 - MASONRY			
	SUPPLEMENTARY PREAMBLES			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Face bricks			
	Bricks shall be ordered timorously to obtain uniformity in size and colour			
	FOUNDATION BRICKWORK			
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)			
1	One brick walls	2 2.26	3	
	BRICKWORK SUNDRIES			
	2.5mm Brickwork Reinforcement			
2	150mm Wide built in horizontally	m 8.88	3	
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6			
	Bill No. 4 MASONRY Tabadimasa Flamental Estimata Bay02			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.5 - WATERPROOFING			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	DAMPPROOFING OF WALLS AND FLOORS			
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)			
1	In walls m2	0.58		
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape			
2	Under Surface bed m2	0.56		
	Carried Forward to Summary of Section No. 6 Section No. 6 Bill No. 5 WATERPROOFING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R	

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.7 - CARPENTRY AND JOINERY			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	Carried Forward  Section No. 6 Bill No. 6 CARPENTRY & JOINERY Tshedimoso Elemental Estimate Rev02		R	
	Stage 3 - Elemental Estimate			

	Brought Forward		R	
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC			
	SUPPLEMENTARY PREAMBLES			
	Trusses are at maximum 1 200mm centres			
	Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins			
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes			
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences			
	DOORS			
	Masonite backing side hung doors			
ı	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	7.00		
2	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	3.00		
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6 Bill No. 6 CARPENTRY & JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount	
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS				
	BILL NO.8 - CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<u>Ceilings</u>				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	Carried Forward		R		_
	Section No. 6 Bill No. 7 CEILINGS, PARTITIONS & ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	46.88		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	1.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	90.90		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	46.88		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 Bill No. 7 CEILINGS, PARTITIONS & ACCESS FLOORING				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.9 - IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	Proprietary items			
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items			
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered			
	On request returnable samples are to be provided to the principal agent for consideration			
	LOCKS			
	Manufactured by approved supplier			
1	1Pr. Duba One lever handles on plate N	10.00		
2	Euro profile cylinder SASH Lock - Chrome Plated N	10.00		
3	66mm Privacy cylinder - Nickle Plated N	10.00		
	SUNDRIES			
	Manufactured by approved supplier			
4	Floor mounted door stop - Satin Chrome N	10.00		
5	Cleat Hook N	10.00		
6	160x160x2mm Push Plate N	10.00		
	Carried Forward to Summary of Section No. 6 Section No. 6 Bill No. 8 IRONMONGERY		R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount	
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS				
	BILL NO.10 - PLUMBING AND DRAINAGE				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	BATHROOM FITTINGS				
	Manufactured by Cobra or similar approved				
1	LECICO ATLAS raised paraplegic closed couple water closet with side lever; wall mounted dodleg grab rail and cistern grab rail combo. W=443mm H=855mm D=731mm White vitreous china. (or equal approved) Code: PARSETCCB0RAIBE	1.00			
2	BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT	1.00			
3	COBRA screw-down angle regulating valve for flexible tubes chrome plated. Includes 1/2"(15mm) male inlet and 1/2"(15mm) female outlet, and sliding wall flange. (or equal approved) Code: 232-10	1.00			
	Carried Forward  Section No. 6  Bill No. 9  PLUMBING & DRAINAGE		R		
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward	Ī		R	
4	COBRA 350mm long; 1/2"(15mm) x 1/2" (15mm) Female to Female Flexible Connector. (or equal approved) Code: C-15/350	No	1.00		
5	COBRA "WELCOME" medium wall hung basin. (430 x 390mm) 1 x punched tap hole in centre of basin. Includes wall fixing set. (or equal approved) Code: CWLBAWH2-6DT01	No	1.00		
6	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	1.00		
7	COBRA basin type bottle trap with 75mm deep seal and telescopic waste connection pipe. 1¼ female inletconnection; 1½ male outlet connection. Brass body, chrome plated. (or equal approved) Code: 350/N	No	1.00		
8	COBRA Elbow actionpillar tap. With 1/4 turn ceramic disc headpart, flanged backnut and blue indice for cold water application. 1/2" (15mm) BSP male iron connection end. (or equal approved) Code: FEAPILEA-5JT01	No	1.00		
9	FRANKE RODAN electrical hand dryer (or equal approved) Code: RODX310	No	1.00		
10	FRANKE EXOS toilet roll holder (or equal approved) Code: RODX672	No	1.00		
11	ICONOMY simple shelf (or equal approved) Code: RODX619	No	1.00		
12	FRANKE RODAN soap dispenser (or equal approved) Code: RODX619	No	1.00		
13	Make good, restore, replace existing sanitary ware to comply to standards.		ltem		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 Bill No. 9 PLUMBING & DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
	•				

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.11 - METALWORKS			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	DOORS			
	Fire Doors			
	Fire doors are to be in accordance with SANS 1253			
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC			
	Carried Forward		R	
	Section No. 6 Bill No. 10 METALWORKS Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

	Brought Forward			R	
	General				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc  Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	PRESSED STEEL DOOR FRAMES				
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 110mm wall				
1	Frame for door 813 x 2032mm high door	No	10.00		
	ALUMINIUM WINDOWS AND DOORS				
	Matt light grey powder coated windows Glazed with  Obscure glass  Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the  manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval				
2	900X600mm Window (W08)	No	3.00		
3	1545X600mm Window (W11)	No	11.00		
	Carried Forward to Summary of Section No. 6 Section No. 6 Bill No. 10 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.12 - PLASTERING			
	SCREEDS			
	Screeds wood floated, on concrete			
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding m2	42.88		
	INTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
2	On walls m2	384.41		
	EXTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
3	On walls m2	174.47		
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6 Bill No. 11			
	PLASTERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS				
	SECTION 2 : BLOCK 1 ADMIN				
	BILL NO.13 - TILING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" ("Ceresit Tylon"?) range of products as recommended by the manufacturer of the tiles				
	WALL TILING				
	152x152x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors				
1	On walls	m2	2.31		
2	On Vanity Counter	m2	5.00		
	FLOOR TILING				
	Carried Forward  Section No. 6  Bill No. 12  TILING  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	350x350x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors				
3	On floors	m2	42.88		
	SUNDRIES				
	Anodised aluminium corner protectors, stair nosing, expansion joint strips, etc				
4	10mm Straight edge corner protectors	m	9.05		
					_
	Carried Forward to Summary of Section No. 6			R	<u> </u>
	Section No. 6 Bill No. 12 TILING				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
-	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS			
	BILL NO.14 - GLAZING			
	SUPPLEMENTARY PREAMBLES			
	Float glass			
	The term "float glass" is used for monolithic glass			
	GLAZING TO STEEL WITH PUTTY			
1	4mm obscure glass m2	7		
	MIRRORS			
	Silvered floated glass copper backed mirrors with polished edges, fixed to wall with double sided adhesive tape and silicone			
2	Mirror 450 x 600mm high	8		
	Carried Forward to Summary of Section No. 6 Section No. 6 Bill No. 13 GLAZING		R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS					
	BILL NO.15 - PAINTWORK					
	SUPPLEMENTARY PREAMBLES					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with Architect specifications unless otherwise described					
	COLOURS					
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
1	Walls	m2	384.41			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
2	Walls and beams	m2	174.47			
	ON FIBRE-CEMENT SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
3	Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	8.46			
	Carried Forward			R		
	Section No. 6 Bill No. 14 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			11		

	Brought Forward			R	
4	Ceilings and cornices	m2	42.88		
	ON METAL SURFACES				
	One coat metal primer and two coats Plascon Velvegro, on steel				
5	Door frames	m2	9.42		
	ON WOOD SURFACES				
	Three coats superior quality clear matt varnish				
6	Internal Door	m2	33.05		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 Bill No. 14				
	PAINTWORK Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

	SECTION SUMMARY - SECTION 6 : EXISTING ABLUTIONS ALTE			
Bill No		Page No		Amount
1	ALTERATIONS	133		
2	EARTHWORKS	135		
3	CONCRETE, FORMWORK & REINFORCEMENT	137		
4	MASONRY	138		
5	WATERPROOFING	139		
6	CARPENTRY & JOINERY	141		
7	CEILINGS, PARTITIONS & ACCESS FLOORING	143		
8	IRONMONGERY	144		
9	PLUMBING & DRAINAGE	146		
10	METALWORKS	148		
11	PLASTERING	149		
12	TILING	151		
13	GLAZING	152		
14	PAINTWORK	154		
	Carried to Final Summary		R	
	Section No. 6 Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			
		I	I	l I

Item No		Quantity	Rate	Amount
	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS			
	BILL NO.1 - ALTERATIONS			
	SUPPLEMENTARY PREAMBLES			
	<u>View site</u>			
	Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	<u>General</u>			
	The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent			
	Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent			
	Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately			
	Carried Forward Section No. 7		R	
	Bill No. 1 ALTERATIONS			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Brought Forward			R		
Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc					
Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing					
With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork					
Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary					
The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)					
REMOVAL OF EXISTING WORK					
Taking out and removing doors, windows, etc, including thresholds, sills, etc to be demolished (building up openings (if required) and making good finishes elsewhere)					
Glazed steel window not exceeding 2,5m <sup>2</sup>	No	48.00			
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>					
Gypsum plasterboard ceilings, including cornices, timber brandering, etc	m2	345.29			
					_
Carried Forward Section No. 7 Bill No. 1 ALTERATIONS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		
	Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc  Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing  With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork  Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary  The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)  REMOVAL OF EXISTING WORK  Taking out and removing doors, windows, etc, including thresholds, sills, etc to be demolished (building up openings, (if required) and making good finishes elsewhere)  Glazed steel window not exceeding 2,5m²  Taking down and removing roofs, floors, panelling, cellings, partitions, etc  Gypsum plasterboard ceilings, including cornices, timber brandering, etc  Carried Forward  Section No. 7  Bill No. 1  ALTERATIONS  Tshedimoso Elemental Estimate Rev02	Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc  Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing  With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork  Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary  The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)  REMOVAL OF EXISTING WORK  Taking out and removing doors, windows, etc, including thresholds, sills, etc to be demolished (building up openings (if required) and making good finishes elsewhere)  Glazed steel window not exceeding 2,5m²  No  Taking down and removing roofs, floors, panelling, ceilings, partitions, etc  Gypsum plasterboard ceilings, including cornices, timber brandering, etc  Carried Forward  Section No. 7  Bill No. 1  ALTERATIONS  Tshedimoso Elemental Estimate Rev02	Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc  Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing  With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc., shall be levelled and prepared for raising of brickwork  Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary  The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)  REMOVAL OF EXISTING WORK  Taking out and removing doors, windows, etc, including thresholds, sills, etc to be demolished (building up openings (if required) and making good finishes elsewhere)  Glazed steel window not exceeding 2,5m²  No 48.00  Taking down and removing roofs, floors, panelling, ceilings, partitions, etc  Gypsum plasterboard ceilings, including cornices, timber brandering, etc  Carried Forward  Section No. 7  Bill No. 1  ALTERATIONS  Tshedimoso Elemental Estimate Rev02	Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc  Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing  With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc., shall be levelled and prepared for raising of brickwork  Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary  The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)  REMOVAL OF EXISTING WORK  Taking out and removing doors, windows, etc., including thresholds, sills, etc to be demolished (building up openings (if required) and making good finishes elsewhere)  Glazed steel window not exceeding 2,5m² No 48.00  Taking down and removing roofs, floors, panelling, ceilings, partitions, etc  Gypsum plasterboard ceilings, including cornices, timber brandering, etc  Carried Forward  R  Section No. 7  Bill No. 1  ALTERATIONS Tshedimoso Elemental Estimate Rev02	Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc  Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing  With regard to building up of openings in existing walls, eement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork  Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary  The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)  REMOVAL OF EXISTING WORK  Taking out and removing doors, windows, etc, including thresholds, sills, etc to be demolished (building up openings, (if required) and making good finishes glsewhere)  Glazed steel window not exceeding 2,5m² No 48.00  Taking down and removing roofs, floors, panelling, ceilings, partitions, etc  Gypsum plasterboard ceilings, including cornices, timber brandering, etc  Carried Forward  R  Section No. 7  Bill No. 1  ALTERATIONS Tshedimoso Elemental Estimate Rev02

	Brought Forward			R	
	Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc				
3	Tiles to floors	m2	345.29		
4	Tile skirtings 100mm high	m	210		
	Country of Continue No. 7			5	
	Carried Forward to Summary of Section No. 7 Section No. 7			R	
	Bill No. 1 ALTERATIONS Tabadimana Flamental Fatimata Bay03				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS				
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	Ceilings				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	Carried Forward Section No. 7 Bill No. 2		R		
	CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
		I	I	II I	

	Brought Forward			R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	345.29		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	4.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	210.33		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	345.29		
	Carried Forward to Summary of Section No. 7 Section No. 7 Bill No. 2 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS			
	BILL NO.8 - FLOOR COVERINGS, WALL LININGS, ETC			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	FLOOR COVERING			
	300 x 300 x 2mm semi flexible vinyl tiles			
1	On floors m2	345.29		
	Openiad Formulation Community (Co. 11)			
	Carried Forward to Summary of Section No. 7 Section No. 7 Bill No. 3 FLOOR COVERINGS, WALL LININGS, ETC Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R	
	Jugo V Liomoniai Loumato			

Item No			Quantity	Rate	Amount	ļ
	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS					
	BILL NO.9 - IRONMONGERY					
	SUPPLEMENTARY PREAMBLES					
	Proprietary items					
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items					
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered					
	On request returnable samples are to be provided to the principal agent for consideration					
	<u>FURNITURE</u>					
	As per Architects Furniture Schedule Rev.00					
1	Teachers desk, 2 drawers, small, steel main frame 21mm Saligna top:1200x700x750mm H	No	2.00			
2	Economy Upholstered Side Chair - Steel main frame - blue material 450mmH	No	2.00			
3	Double Lower Primary Table - Stackable Steel Frame, Saligna Top:1000x450x575mmH	No	16.00			
4	Lower Primary Chair - Stackable steel frame, small blue polyprop seat: 350mmH	No	50.00			
5	Stationery Cupboard, 2 Doors - Edged Natural Oak Melamine: 900x360x1500mmH	No	2.00			
	Carried Forward  Section No. 7  Bill No. 4  IRONMONGERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
6	Green Chalkboards: 1200x1500mm: NON-MAGNETIC	No	8.00		
7	Bulletin Boards: 2400x1200mm: Carpet Pinning Board	No	4.00		
	Carried Forward to Summary of Section No. 7 Section No. 7 Bill No. 4 IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount	
	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS				
	BILL NO.10 - METALWORKS				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	<u>DOORS</u>				
	Fire Doors				
	Fire doors are to be in accordance with SANS 1253				
	ALUMINIUM WINDOWS AND DOORS				
	Carried Forward		R		
	Section No. 7 Bill No. 5				
	METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Brought Forward			R		
Matt light grey powder coated windows Glazed with GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.					
1045x1533mm Window (W09)	No	18.00			
1500x1533mm Window (W10)	No	15.00			
Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval					
1545X600mm Window (W11)	No	15.00			
Carried Forward to Summary of Section No. 7 Section No. 7 Sill No. 5 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		
	GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.  1045x1533mm Window (W09)  1500x1533mm Window (W10)  Matt light grey powder coated windows Glazed with Obscure glass. Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137; 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval  1545X600mm Window (W11)	GSA SmartGlass - Neutral Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the  manufacturer permanently marked on each sheet visible  after glazing, in  accordance with NBR N schedule 1 and SANS 10137;  2012 Ironmongery: Supplied by window Manufacturer,  all to Architects approval  Burglar Proofing to be provided all to Architects  approval.  1045x1533mm Window (W09) No  1500x1533mm Window (W10) No  Matt light grey powder coated windows Glazed with  Obscure glass  Low E Smart Glass- complying with SANS 1263 Part 1,  2 or 3 with name of the  manufacturer permanently marked on each sheet visible  after glazing, in  accordance with NBR N schedule 1 and SANS 10137;  2012 Ironmongery: Supplied by window Manufacturer,  all to Architects approval  Burglar Proofing to be provided all to Architects  approval  1545X600mm Window (W11) No   Carried Forward to Summary of Section No. 7  Section No. 7  Bill No. 5  METALWORKS  Tshedimoso Elemental Estimate Rev02	GSA SmartGlass - Neutral Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the  manufacturer permanently marked on each sheet visible  after glazing, in  accordance with NBR N schedule 1 and SANS 10137:  2012 Ironmongery: Supplied by window Manufacturer,  all to Architects approval  Burglar Proofing to be provided all to Architects  approval.  1045x1533mm Window (W09) No 15.00  Matt light grey powder coated windows Glazed with  Obscure glass  Low E Smart Glass- complying with SANS 1263 Part 1,  2 or 3 with name of the  manufacturer permanently marked on each sheet visible  after glazing, in  accordance with NBR N schedule 1 and SANS 10137;  2012 Ironmongery: Supplied by window Manufacturer,  all to Architects approval  Burglar Proofing to be provided all to Architects  approval  1545X600mm Window (W11) No 15.00  Carried Forward to Summary of Section No. 7  Section No. 7 Bill No. 5  METALWORKS Tshedimoso Elemental Estimate Rev02	GSA SmartGlass - Neutral Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137; 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.  1045x1533mm Window (W09) No 15:00 Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137; 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval  1545X600mm Window (W11) No 15:00  Carried Forward to Summary of Section No. 7  Section No. 7 Bill No. 5 METALWORKS Tshedimoso Elemental Estimate Rev02	GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery. Supplied by window Manufacturer, all to Architects approval.  1045x1533mm Window (W09) No 18.00  Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 tronmongery: Supplied by window Manufacturer, all to Architects approval.  Carried Forward to Summary of Section No. 7  Section No. 7  Bill No. 5  METALWORKS Tshedimoso Elemental Estimate Rev02

Item No			Quantity	Rate	Amount
	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS				
	BILL NO.12 - PAINTWORK				
	SUPPLEMENTARY PREAMBLES				
	PAINT SPECIFICATIONS				
	All painting shall be done in accordance with Architect specifications unless otherwise described				
	COLOURS				
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091				
	ON INTERNAL FLOATED PLASTER SURFACES				
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use				
1	Walls	m2	635.09		
	ON EXTERNAL FLOATED PLASTER SURFACES				
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use				
2	Walls and beams	m2	528.15		
	ON FIBRE-CEMENT SURFACES				
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use				
3	Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	80.49		
				1	
	Section No. 7 Bill No. 6 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
4	Ceilings and cornices	m2	345.29		
	ON METAL SURFACES				
	One coat metal primer and two coats Plascon Velvegro, on steel				
5	Door frames	m2	7.54		
	ON WOOD SURFACES				
	One coat primer and two coats premium quality polyurethane enamel paint				
6	External door	m2	26.44		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 Bill No. 6				
	PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	SECTION SUMMARY - SECTION 7 : ALTERATIONS TO EXISTING	CLASSRO	<u> </u>		
Bill No		Page No		Amount	
1	ALTERATIONS	158			
2	CEILINGS, PARTITIONS AND ACCESS FLOORING	160			ļ
3	FLOOR COVERINGS, WALL LININGS, ETC	161			İ
4	IRONMONGERY	163			
5	METALWORKS	165			
6	PAINTWORK	167			
	Carried to Final Summary Section No. 7 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R		

Item No		Ī	Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE	Ī			
	BILL NO.1 - EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site				
	Excavation				
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. "Soft rock" and "hard rock" shall be as defined in "Earthworks"				
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill				
	EXCAVATIONS				
	Excavations in earth not exceeding 2m deep				
1	Foundations	m3	11.67		
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	8.28		
	Carried Forward			R	
	Section No. 8 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Brought Forward			R	
		ı		
other than d and Expenditure)		Item		
ons and/or prescribed 00mm layers to 93%				
etc	m3	3.39		
e-compact ground rface bed etc. by d AASTHO	m2	17.53		
	No	1.00		
Architects				
and poisoning shallow tc. filling and	m2	22.92		
etc	m2	43.34		
mary of Section No. 8 Rev02			R	

Item No			Quantity	Rate	Amount	
	SECTION 8 : SECURITY GUARD HOUSE					
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
	SUPPLEMENTARY PREAMBLES					
	Cost of test					
	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)					
	<u>Formwork</u>					
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25Mpa/19mm Concrete					
1	Strip footings and Column Bases	m3	2.24			
2	Surface beds on waterproofing	m3	0.79			
3	Apron	m3	1.76			
4	Roof Beam	m3	1.00			
	Carried Forward  Section No. 8  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		

	Brought Forward			R		
	SMOOTH FORMWORK					
	Smooth formwork to soffits					
5	Roof Beam	m2	11.20			
	TEST CUBES					
6	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	1.00			
	CONCRETE SUNDRIES					
	Finishing top of surface bed smooth with a power float					
7	Surface beds, slabs, etc	m2	8.00			
	Finishing top of surface bed smooth with a wood float					
8	Apron	m2	31.00			
	MOVEMENT JOINT					
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces					
9	Not exceeding 300mm high to edges of surface bed	m	16.59			
	REINFORCEMENT					
	Mild steel reinforcement for structural concrete work					
10	8mm diameter bars	t	0.04			
						_
	Carried Forward Section No. 8 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		
		ı	ı		ı	

+
+
- 1

Item No			Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.3 - MASONRY				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timorously to obtain uniformity in size and colour				
	FOUNDATION BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
1	Half brick walls	m2	3.31		
2	One brick walls	m2	33.04		
	SUPERSTRUCTURE BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
3	Half brick walls	m2	5.93		
4	One Brick Walls	m2	35.06		
5	One brick gable Walls	m2	2.89		
6	Half brick wall in beamfilling	m2	1.17		
	BRICKWORK SUNDRIES				
				_	
	Section No. 8 Bill No. 3 MASONRY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	2.5mm Brickwork Reinforcement				
7	75mm Wide built in horizontally	m	50.08		
8	150mm Wide built in horizontally	m	272.07		
	FACE BRICKWORK				
	Moroccan red blend travertine or similar approved face bricks pointed with flush horizontal and vertical joints				
9	Extra over brickwork for face brickwork in foundations (provisional)	m2	3.52		
10	Extra over brickwork for face brickwork	m2	27.05		
	Brick-on-edge header coarse copings, sills etc of Moroccan red blend travertine or similar approved face bricks, pointed with recessed joints on all exposed faces				
11	220mm Wide sills set sloping and slightly projected	m	3.00		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 3 MASONRY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.4 - WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)				
1	In walls	m2	9.59		
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape				
2	Under Surface bed	m2	9.47		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 4 WATERPROOFING			R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.5 - ROOF COVERING				
	SUPPLEMENTARY PREAMBLES				
	IBR ROOF COVERING				
	<u>Guarantees</u>				
	The contractor will be required to provide a written guarantee for the roof covering as follows:				
	IBR roof covering material - 10 years Workmanship - 10 years				
	Certificate for Galvanised Roof Sheeting  The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering				
	supplied, complies with the required thickness specified  Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	IBR PROFILE SHEETING				
	IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins				
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	17.54			
	Carried Forward		R		_
	Section No. 8 Bill No. 5 ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Sisalation 405 Reflective foil underlay in accordance with SANS 1381-4 overlapped longitudinally by 100mm; on and including galvanised straining wire spaced at 383mm centres fixed parallel over purlins to manufacturer's instruction				
2	Insulation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrently with roof covering with minimum 150mm stapled laps including galvanised straining wires at not exceeding 400mm centres and one-sided tape at edges where required (Layer 1) (LI)	m2	16.66		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 5 ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount	Ī
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.6 - CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	Carried Forward		R		
	Section No. 8 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	SUPPLEMENTARY PREAMBLES				
	Trusses are at maximum 1 200mm centres				
	Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins				
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	Sawn softwood trusses				
1	Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc	m2	17.54		
	Sundries				
2	30x1.6mm Galvanised steel straps built 600mm deep into brickwork	No	10.88		
3	Two Coats creosote on sawn timbers	m2	10.97		
4	Engineers Certificate		Item		
	EAVES, VERGES, ETC				
	Carried Forward Section No. 8 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
ļ	Medium density plain fibre-cement fascia's and barge boards				
5	Everite medium density plain ungrooved Nutec fascia boards (Code: 041-202), size 225x12mm, fixed to 76x50mm SAP timber tilter batten and 38x38mm SAP timber support battens between rafters twice screwed with 12x40mm countersunk brass screws at 900mm c/c to support battens with aluminium H-profile fascia joiner between boards and aluminium H-profile fascia corner joiners at board ends.	m	8.08		
	SKIRTINGS				
	Fine grained compresses woodpulp / cane purpose made				
6	76 x 19 mm Skirtings, nailed	m	16.59		
	DOORS				
	Masonite backing side hung doors				
7	Hardwood door 44 x 813 x 2032mm with masonite backing, hung to steel frame, including Lockblocks and wood screws	No	1.00		
8	Semi Solid 44 x 813 x 2032mm with masonite backing, hung to steel frame, including 400x400mm Aluminium Louvre Grill, Lockblocks and wood screws	No	1.00		
					_
	Carried Forward to Summary of Section No. 8			R	_
	Section No. 8 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate  Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<u>Ceilings</u>				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	Carried Forward		R		
	Section No. 8 Bill No. 7				
	CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	7.79		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	1.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	16.57		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	7.79		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE			
	BILL NO.8 - FLOOR COVERINGS, WALL LININGS, ETC			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	FLOOR COVERING			
	300 x 300 x 2mm semi flexible vinyl tiles			
1	On floors m	7.81		
	Carried Forward to Summary of Section No. 8		R	
	Section No. 8 Bill No. 8 FLOOR COVERINGS, WALL LININGS, ETC Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.9 - IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items  Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	LOCKS				
	Manufactured by approved supplier				
1	1Pr. Duba One lever handles on plate	No	2.00		
2	Euro profile cylinder SASH Lock - Chrome Plated	No	2.00		
3	66mm Privacy cylinder - Nickle Plated	No	2.00		
	SUNDRIES				
	Manufactured by approved supplier				
4	Floor mounted door stop - Satin Chrome	No	2.00		
	<u>FURNITURE</u>				
	Carried Forward  Section No. 8  Bill No. 9  IRONMONGERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

Section No. 8 Bill No. 9

	Brought Forward		R	
	As per Architects Furniture Schedule Rev.00			
5	Economy Upholstered Typist Chair - swivel, without arms on 5 star base, blue material No	1.00		
	Carried Forward to Summary of Section No. 8 Section No. 8		R	_
	Bill No. 9 IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 8 : SECURITY GUARD HOUSE					
	BILL NO.10 - PLUMBING AND DRAINAGE					
	SUPPLEMENTARY PREAMBLES					
	Proprietary items					
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items					
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered					
	On request returnable samples are to be provided to the principal agent for consideration					
	BATHROOM FITTINGS					
	Manufactured by Cobra or similar approved					
1	LECICO NEON Front Flush Closed Couple Toilet Suite without toilet seat (or equal approved) Codes: Cistern: NEOCISFFL0NOMUE Pan: NEOPANFLO0000UE	No	1.00			
2	BUXTON STA-TITE Technoplastic thermoplastic universal toilet seat with chrome-plated hinges with patented fixing system that always stays tight. 100% recyclable. Code: 2850CPT	No	1.00			
3	COBRA screw-down angle regulating valve for flexible tubes chrome plated. Includes 1/2"(15mm) male inlet and 1/2"(15mm) female outlet, and sliding wall flange.	Na	4.00			
	(or equal approved) Code: 232-10	No	1.00			
	Carried Forward			R		
	Section No. 8 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

	Brought Forward			R	
4	COBRA 350mm long; 1/2"(15mm) x 1/2" (15mm) Female to Female Flexible Connector. (or equal approved) Code: C-15/350	No	1.00		
5	COBRA "WELCOME" medium wall hung basin. (430 x 390mm) 1 x punched tap hole in centre of basin. Includes wall fixing set. (or equal approved) Code: CWLBAWH2-6DT01	No	1.00		
6	COBRA slotted basin waste with plug, chrome plated. Includes: 62mm diameter flange, 77mm long shank and 32mm BSP male outlet connection with polymer backnut. (or equal approved) Code: 303	No	1.00		
7	COBRA basin type bottle trap with 75mm deep seal and telescopic waste connection pipe. 1¼ female inletconnection; 1½ male outlet connection. Brass body, chrome plated. (or equal approved) Code: 350/N	No	1.00		
8	GROHE EUROECO Cosmopolitan T Self Closing Pillar Tap. Grohe ECOJOY 5.7lt/min flow limiter with 3 adjustable flow times, short, medium and long. Approx 7; 15; 30 second (Pressure dependant) minimum recommended operation pressure 100kPa. (or equal approved) Code: G-36265000	No	1.00		
9	FRANKE RODAN towel roll holder (or equal approved) Code: RODX672	No	1.00		
10	FRANKE RODAN soap dispenser (or equal approved) Code: RODX619	No	1.00		
11	FRANKE STRATOS paper towel dispenser (or equal approved) Code: STRX637	No	1.00		
12	FRANKE RODAN waste bin (or equal approved) Code: RODX605	No	1.00		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 10 PLUMBING AND DRAINAGE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount	
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.11 - METALWORKS				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	DOORS				
	Fire Doors				
	Fire doors are to be in accordance with SANS 1253				
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
	Section No. 8 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02		R		
	Stage 3 - Elemental Estimate				

	Brought Forward			R	
	<u>General</u>				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc				
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	PRESSED STEEL DOOR FRAMES				
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 220mm wall				
1	Frame for door 813 x 2032mm high door	No	1.00		
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 110mm wall				
2	Frame for door 813 x 2032mm high door	No	1.00		
	ALUMINIUM WINDOWS AND DOORS				
	Carried Forward  Section No. 8  Bill No. 11  METALWORKS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
	Matt light grey powder coated windows Glazed with GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
3	900x1200mm Window (W01)	No	1.00		
	Matt light grey powder coated windows Glazed with Obscure glass Low E Smart Glass- complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
4	600x900mm Window (W04)	No	1.00		
5	600x600mm Window (W07)	No	1.00		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 11 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.12 - PLASTERING				
	SCREEDS				
	Screeds wood floated, on concrete				
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding	m2	7.81		
	INTERNAL PLASTER				
	Cement plaster steel trowelled on brickwork				
2	On walls	n2	46.92		
3	On narrow widths	n2	2.00		
	EXTERNAL PLASTER				
	Cement plaster steel trowelled on brickwork				
4	On walls	n2	10.90		
	Cement plaster steel trowelled on concrete				
5	Plaster to roof beam r	n2	11.20		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 Bill No. 12 PLASTERING				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE				
	BILL NO.13 - TILING				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" ("Ceresit Tylon"?) range of products as recommended by the manufacturer of the tiles				
	WALL TILING				
	152x152x6.5mm/5mm Thick Ceramic tiles fixed with adhesive to plaster and flush pointed with tinted grout on floors				
1	On walls	m	0.28		
	SUNDRIES				
	Anodised aluminium corner protectors, stair nosing, expansion joint strips, etc				
2	10mm Straight edge corner protectors	m	0.92		
3	15mm Straight edge weather strip	m	1.00		
4	T-Piece/Expansion	m	10.00		
	Carried Forward to Summary of Section No. 8 Section No. 8 Bill No. 13 TILING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 8 : SECURITY GUARD HOUSE			
	BILL NO.14 - GLAZING			
	SUPPLEMENTARY PREAMBLES			
	Float glass			
	The term "float glass" is used for monolithic glass			
	MIRRORS			
	Silvered floated glass copper backed mirrors with polished edges, fixed to wall with double sided adhesive tape and silicone			
1	Mirror 450 x 600mm high	1		
	Carried Forward to Summary of Section No. 8		R	
	Section No. 8 Bill No. 14			
	GLAZING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 8 : SECURITY GUARD HOUSE					
	BILL NO.15 - PAINTWORK					
	SUPPLEMENTARY PREAMBLES					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with Architect specifications unless otherwise described					
	COLOURS					
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
1	Walls	m2	47.97			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
2	Walls and beams	m2	22.10			
	ON FIBRE-CEMENT SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
3	Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	8.77			
	Carried Forward			R		
	Section No. 8 Bill No. 15 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

	Brought Forward			R	
4	Ceilings and cornices	m2	7.79		
	ON METAL SURFACES				
	One coat metal primer and two coats Plascon Velvegro, on steel				
5	Door frames	m2	1.89		
	ON WOOD SURFACES				
	One coat primer and two coats premium quality polyurethane enamel paint				
6	External door	m2	3.31		
	Three coats superior quality clear matt varnish				
7	Internal Door	m2	3.31		
	Carried Ferward to Summers of Section No. 9			R	
	Carried Forward to Summary of Section No. 8 Section No. 8				
	Bill No. 15 PAINTWORK				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	SECTION SUMMARY - SECTION 8 : SECURITY GUARD HOUSE			
Bill No		Page No		Amount
1	EARTHWORKS (PROVISIONAL)	170		
2	CONCRETE, FORMWORK AND REINFORCEMENT	173		
3	MASONRY	175		
4	WATERPROOFING	176		
5	ROOF COVERING	178		
6	CARPENTRY AND JOINERY	181		
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	183		
8	FLOOR COVERINGS, WALL LININGS, ETC	184		
9	IRONMONGERY	186		
10	PLUMBING AND DRAINAGE	188		
11	METALWORKS	191		
12	PLASTERING	192		
13	TILING	193		
14	GLAZING	194		
15	PAINTWORK	196		
	Carried to Final Summary		R	
	Section No. 8 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 9 : PUMP ROOM			
	BILL NO.1 - EARTHWORKS (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.			
	Carting away of excavated material			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site			
	Excavation			
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. " Soft rock" and "hard rock" shall be as defined in "Earthworks"			
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill			
	EXCAVATIONS			
	Excavations in earth not exceeding 2m deep			
1	Foundations m3	9.44		
	Extra over all excavations for carting away			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor m3	6.70		
	Carried Forward		R	
	Section No. 9 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
	Keeping excavations free of water				
3	Keeping excavations free of water other than subterranean water (Proven Method and Expenditure)		Item		
	FILLING				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
4	Backfilling to strip footings, bases etc	m3	1.92		
	Compaction of surfaces				
5	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	11.80		
	Prescribed density tests on filling				
6	"Modified AASTHO Density" test	No	1.00		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
7	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	17.52		
8	To bottoms and sides of trenches etc	m2	38.78		
	Carried Forward to Summary of Section No. 9 Section No. 9 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	· · · · · · · · · · · · · · · · · · ·				

Item No			Quantity	Rate	Amount	
	SECTION 9 : PUMP ROOM					
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
	SUPPLEMENTARY PREAMBLES					
	Cost of test					
	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)					
	<u>Formwork</u>					
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25Mpa/19mm Concrete					
1	Strip footings and Column Bases	m3	2.71			
2	Surface beds on waterproofing	m3	3.89			
3	Apron	m3	1.84			
	Carried Forward  Section No. 9  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		_

	Brought Forward			R	
	TEST CUBES				
4	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	1.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a power float				
5	Surface beds, slabs, etc	m2	15.72		
	Finishing top of surface bed smooth with a wood float				
6	Apron	m2	18.41		
	MOVEMENT JOINT				
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
7	Not exceeding 300mm high to edges of surface bed	m	7.90		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
8	8mm diameter bars	t	0.04		
	High tensile reinforcement for structural concrete work				
9	10mm Diameter bars	t	0.11		
10	12mm Diameter bars	t	0.20		
	Carried Forward  Section No. 9  Bill No. 2  CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward		R	
ļ	Fabric mesh reinforcement			
11	Type Ref 193 fabric reinforcement in concrete slabs etc. m2	23.68		
				<u>—</u>
	Carried Forward to Summary of Section No. 9 Section No. 9		R	<u>=</u>
	Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 9 : PUMP ROOM	1				
	BILL NO.3 - MASONRY					
	SUPPLEMENTARY PREAMBLES					
	Sizes in descriptions					
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick					
	Face bricks					
	Bricks shall be ordered timorously to obtain uniformity in size and colour					
	FOUNDATION BRICKWORK					
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)					
1	One Brick Walls	m2	17.20			
	SUPERSTRUCTURE BRICKWORK					
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)					
2	One Brick Walls	m2	50.58			
3	Half brick wall in beamfilling	m2	1.02			
	BRICKWORK SUNDRIES					
	2.5mm Brickwork Reinforcement					
4	150mm Wide built in horizontally	m	228.00			
	Carried Forward to Summary of Section No. 9 Section No. 9			R		_
	Bill No. 3 MASONRY					
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

Item No			Quantity	Rate	Amount	
	SECTION 9 : PUMP ROOM					
	BILL NO.4 - WATERPROOFING					
	SUPPLEMENTARY PREAMBLES					
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill					
	DAMPPROOFING OF WALLS AND FLOORS					
	One layer 375 micron embossed damp proof course (SABS 9520 Type B)					
1	In walls	m2	19.24			
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape					
2	Under Surface bed	m2	17.86			
	Carried Forward to Summary of Section No. 9			R		
	Section No. 9 Bill No. 4 WATERPROOFING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

Item No		Quantity	Rate	Amount
	SECTION 9 : PUMP ROOM			
	BILL NO.5 - ROOF COVERING			
	SUPPLEMENTARY PREAMBLES			
	IBR ROOF COVERING			
	Guarantees			
	The contractor will be required to provide a written guarantee for the roof covering as follows:			
	IBR roof covering material - 10 years Workmanship - 10 years			
	Certificate for Galvanised Roof Sheeting			
	The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified			
	<b>Note:</b> Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	IBR PROFILE SHEETING			
	IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins			
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	25.11		
	Carried Forward Section No. 9 Bill No. 5		R	
	ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
2	ROOF AND WALL INSULATION  Sisalation 405 Reflective foil underlay in accordance with SANS 1381-4 overlapped longitudinally by 100mm; on and including galvanised straining wire spaced at 383mm centres fixed parallel over purlins to manufacturer's instruction  Insulation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrently with roof covering with minimum 150mm stapled laps including galvanised straining wires at not exceeding 400mm centres and one-sided tape at edges where	m2	23.85	R	
	Carried Forward to Summary of Section No. 9 Section No. 9 Bill No. 5 ROOF COVERING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No		Quantity	Rate	Amount
	SECTION 9 : PUMP ROOM			
	BILL NO.6 - CARPENTRY AND JOINERY			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres and where described as "bolted", the bolts have been given elsewhere			
	<u>Joinery</u>			
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	Carried Forward		R	
	Section No. 9 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	Brought Forward			R	
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	SUPPLEMENTARY PREAMBLES				
	Trusses are at maximum 1 200mm centres				
	Roof coverings are IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting on purlins				
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	Sawn softwood trusses				
1	Roof construction to 17 degree double pitched roof with SA Pine Timber trusses at 1000mm c/c as per roofing specialist design and specification complete with 114 x 38mm SA pine timber wall plates, 76 x 50mm SA pine timber purlins, bracing, platform, laminated beams and support for future solar geysers, etc	m2	25.11		
	Sundries				
2	30x1.6mm Galvanised steel straps built 600mm deep into brickwork	No	12.00		
3	Two Coats creosote on sawn timbers	m2	9.96		
4	Engineers Certificate		Item		
	EAVES, VERGES, ETC				
	Carried Forward Section No. 9 Bill No. 6 CARPENTRY AND JOINERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Section No. 9 Bill No. 6

	Brought Forward		R	
	Medium density plain fibre-cement fascia's and barge boards			
5	10x225mm Fascia's and barge boards, including galvanized steel H-profile joiners m	11.63		
	Carried Forward to Summary of Section No. 9  Section No. 9  Bill No. 6  CARPENTRY AND JOINERY  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate		R	

Item No		Quantity	Rate	Amount
	SECTION 9 : PUMP ROOM			
	BILL NO.7 - CEILINGS, PARTITIONS AND ACCESS FLOORING			
	SUPPLEMENTARY PREAMBLES			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere			
	<u>Ceilings</u>			
	Unless otherwise described ceilings shall be deemed to be horizontal			
	NAILED-UP CEILINGS			
	SUPPLEMENTARY PREAMBLES			
	<u>Openings</u>			
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc			
	Carried Forward		R	
	Section No. 9 Bill No. 7 CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

	Brought Forward			R	
	6mm Everite Nutec ceilings				
1	Everite Nutec 6mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, standard size: 1200x3600mm fixed to 38x50mm SAP timber brandering at 600mm c/c using 32x2,5mm serrated ceiling nails at 150mm c/c, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations	m2	16.23		
2	Extra over ceilings 600x600mm trap door opening with 50x38mm SAP braced frame, filled with top hinged metal panel door. (Colour White)	No	1.00		
	Hardboard cornices				
3	83mm Masonite coved hardboard cornices nailed to battens at max. 300mm c/c all round.	m	16.26		
	120mm Flexible fibreglass insulation				
4	120mm Insulation in blanket form lapped not less than 50mm along all edges and laid on top of brandering between roof timbers etc	m2	16.23		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 Bill No. 7				
	CEILINGS, PARTITIONS AND ACCESS FLOORING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 9 : PUMP ROOM				
	BILL NO.8 - IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	Proprietary items				
	Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	LOCKS				
	Manufactured by approved supplier				
1	1Pr. Duba One lever handles on plate	No	1.00		
2	Euro profile cylinder SASH Lock - Chrome Plated	No	1.00		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 Bill No. 8 IRONMONGERY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 9 : PUMP ROOM				
	BILL NO.9 - METALWORKS				
	SUPPLEMENTARY PREAMBLES				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transoms, rails, etc				
	Description of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	DOORS				
	Fire Doors				
	Fire doors are to be in accordance with SANS 1253				
	CUPBOARDS TO KITCHENS, BEDROOMS, ETC				
					_
	Section No. 9 Bill No. 9 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R		

	Brought Forward			R	
	General				
	The following cupboard fittings have been given as complete units i.e. the components of the units have not been given separately. Description of such units shall, therefore, be deemed to include all components, assembling, housing, notching, gluing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or vanish finishes, etc  Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill				
	PRESSED STEEL DOOR FRAMES				
	1.6mm pressed metal door frames incl 1.6mm sheet metal weather hood, double rebate with profiles to conform to SABS 1129-1977, fitted complete with one and a half pair heavy duty 100mm/4.2mm butt hinges, adjustable striking plate, rubber buffers and fixing lugs, suitable for 220mm wall				
1	Frame for door 813 x 2032mm high door	No	1.00		
	Steel Combination Louvre Double Door				
2	Steel Combination Louvre Double Door size 1525x2440x230mm	No	1.00		
	ALUMINIUM WINDOWS AND DOORS				
	Matt light grey powder coated windows Glazed with GSA SmartGlass - Neutral Low E Smart Glass-complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, in accordance with NBR N schedule 1 and SANS 10137: 2012 Ironmongery: Supplied by window Manufacturer, all to Architects approval Burglar Proofing to be provided all to Architects approval.				
3	900x1200mm Window (W01)	No	1.00		
	Carried Forward to Summary of Section No. 9 Section No. 9 Bill No. 9 METALWORKS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

Item No		Quantity	Rate	Amount
	SECTION 9 : PUMP ROOM			
	BILL NO.10 - PLASTERING			
	SCREEDS			
	Screeds wood floated, on concrete			
1	25mm Thick screed on surface bed, incl chipping, cleaning and brushing with Cement/Sand slurry before screeding m2	7.81		
	INTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
2	On walls m2	46.92		
3	On narrow widths m2	2.00		
	EXTERNAL PLASTER			
	Cement plaster steel trowelled on brickwork			
4	On walls m2	10.90		
	Carried Forward to Summary of Section No. 9		R	
	Section No. 9 Bill No. 10 PLASTERING			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 9 : PUMP ROOM					
	BILL NO.11 - PAINTWORK					
	SUPPLEMENTARY PREAMBLES					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with Architect specifications unless otherwise described					
	COLOURS					
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
1	Walls	m2	47.97			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for internal and external use					
2	Walls and beams	m2	22.10			
	ON FIBRE-CEMENT SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
3	Fascia and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	8.77			
	Carried Forward			R		
	Section No. 9 Bill No. 11 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

	Brought Forward			R	
4	Ceilings and cornices	m2	7.79		
	ON METAL SURFACES				
	One coat metal primer and two coats Plascon Velvegro, on steel				
5	Door frames	m2	6.00		
	ON WOOD SURFACES				
	One coat primer and two coats premium quality polyurethane enamel paint				
6	External door	m2	3.31		
				_	
	Carried Forward to Summary of Section No. 9 Section No. 9			R	
	Bill No. 11 PAINTWORK				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	SECTION SUMMARY - SECTION 9 : PUMP ROOM			
Bill No		Page No		Amount
1	EARTHWORKS (PROVISIONAL)	199		
2	CONCRETE, FORMWORK AND REINFORCEMENT	202		
3	MASONRY	203		
4	WATERPROOFING	204		
5	ROOF COVERING	206		
6	CARPENTRY AND JOINERY	209		
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	211		
8	IRONMONGERY	212		
9	METALWORKS	214		
10	PLASTERING	215		
11	PAINTWORK	217		
	Carried to Final Summary		R	
	Section No. 9 Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount	
	SECTION 10 : COVERED WALKWAYS				
	BILL NO.1 - EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site				
	Excavation				
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. "Soft rock" and "hard rock" shall be as defined in "Earthworks"				
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill				
	EXCAVATIONS				
	Excavations in earth not exceeding 2m deep				
1	Foundations m	118.18			
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor m	57.07			
	Carried Forward		R		
	Section No. 10 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Keeping excavations free of water				
3	Keeping excavations free of water other than subterranean water (Proven Method and Expenditure)		Item		
	FILLING				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
4	Backfilling to strip footings, bases etc	m3	61.11		
	Earth filling obtained from commercial sources				
5	Selected (G5) layers constructed to 150 mm thickness compact to 95% of mod. AASHTO maximum density	m3	31.19		
	Compaction of surfaces				
6	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	332.92		
	Prescribed density tests on filling				
7	"Modified AASTHO Density" test	No	5.00		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
8	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	205.84		
9	To bottoms and sides of trenches etc	m2	461.28		
	Carried Forward to Summary of Section No. 10 Section No. 10 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R _	

Item No			Quantity	Rate	Amount	
	SECTION 10 : COVERED WALKWAYS					
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT					
	SUPPLEMENTARY PREAMBLES					
	Cost of test					
	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)					
	<u>Formwork</u>					
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25Mpa/19mm Concrete					
1	Strip footings and Column Bases	m3	29.71			
2	Surface beds on waterproofing	m3	22.00			
	Carried Forward			R		
	Section No. 10 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

	Brought Forward			R	
	TEST CUBES				
3	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	2.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a wood float				
4	Walkway	m2	13.30		
	MOVEMENT JOINT				
	10mm Expansion joint with closed cell expanded polyethylene foam (or similar approved) with field moulded sealant between surface bed and brick surfaces				
5	Not exceeding 300mm high to edges of surface bed	m	13.30		
	10mm Construction joint between vertical concrete surfaces, debonded with Lime Wash or Bitumen, groove and sealant saw cut filled with Polysulphide sealant Durakol 25 or Similar approved with Polyethylene bond breaker backing tape				
6	Surface beds and Apron not exceeding 300mm thick	m	68.61		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
7	8mm diameter bars	t	0.34		
	High tensile reinforcement for structural concrete work				
8	10mm Diameter bars	t	1.13		
				_	_
	Section No. 10 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
9	12mm Diameter bars	t	0.04		
	Fabric mesh reinforcement				
10	Type Ref 193 fabric reinforcement in concrete slabs etc.	m2	205.84		
	Carried Forward to Summary of Section No. 10			R	
	Section No. 10 Bill No. 2				<del> </del>
	CONCRETE, FORMWORK AND REINFORCEMENT  Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 10 : COVERED WALKWAYS				
	BILL NO.3 - MASONRY				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timorously to obtain uniformity in size and colour				
	FOUNDATION BRICKWORK				
	Brickwork of NFP burnt clay bricks (14MPa nominal compressive strength) in class II mortar (SABS 227)				
1	One Brick Walls	m2	147.61		
	BRICKWORK SUNDRIES				
	2.5mm Brickwork Reinforcement				
2	150mm Wide built in horizontally	m	1 024.00		
	FACE BRICKWORK				
	Moroccan red blend travertine or similar approved face bricks pointed with flush horizontal and vertical joints				
3	Extra over brickwork for face brickwork in foundations (provisional)	m2	47.05		
	Carried Forward			R	
	Section No. 10 Bill No. 3 MASONRY				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Brick-on-edge header coarse copings, sills etc of  Moroccan red blend travertine or similar approved face bricks, pointed with recessed joints on all exposed faces	1			
4	220mm Wide sills set sloping and slightly projected	m	184.51		
	Comind Formural to Commence of Continue No. 40			5	$\vdash$
	Carried Forward to Summary of Section No. 10 Section No. 10			R	+
	Bill No. 3 MASONRY Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 10 : COVERED WALKWAYS			
	BILL NO.4 - WATERPROOFING			
	SUPPLEMENTARY PREAMBLES			
	Note: Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	DAMPPROOFING OF WALLS AND FLOORS			
	One layer of 250 micron damp proof course (SABS Specification 9520 Type C) waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape			
1	Under Surface bed m2	205.84		
	Carried Forward to Summary of Section No. 10		R	
	Section No. 10 Bill No. 4 WATERPROOFING			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 10 : COVERED WALKWAYS			
	BILL NO.5 - ROOF COVERING			
	SUPPLEMENTARY PREAMBLES			
	IBR ROOF COVERING			
	<u>Guarantees</u>			
	The contractor will be required to provide a written guarantee for the roof covering as follows:			
	IBR roof covering material - 10 years Workmanship - 10 years			
	Certificate for Galvanised Roof Sheeting			
	The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified			
	<b>Note:</b> Tenderers are advised to study the Model Preambles for Trades before pricing this bill			
	IBR PROFILE SHEETING			
	IBR-profile 0.58mm thick Z275 spelter galvanised steel roof sheeting @ 17°, fixed to timber purlins			
1	Roof covering with 17 degree pitch and accessories, including ridge capping, gable and gable trims, flashings etc. Concealed fixed to 76x50mm SA pine Timber purlins @ 1200mm c/c (elsewhere measured) m2	287.81		
	Carried Forward to Summary of Section No. 10		R	
	Section No. 10 Bill No. 5			
	ROOF COVERING  Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 10 : COVERED WALKWAYS			
	BILL NO.6 - METALWORKS			
	SUPPLEMENTARY PREAMBLES			
	76x76x3mm Thick square hollow mild steel framework with rounded corners with brackets for 76x38x2mm thick rectangular hollow mild steel purlins.			
1	2400(h)x1980(w) fixed to the walkway as per engineers detail No	102.00		
2	60x40x2mm Thick rectangular hollow mild steel perlin bolted to brakets on framework No	278.52		
	Carried Forward to Summary of Section No. 10		R	
	Section No. 10 Bill No. 6 METALWORKS Tshedimoso Elemental Estimate Rev02			
	Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 10 : COVERED WALKWAYS			
	BILL NO.7 - PAINTWORK			
	SUPPLEMENTARY PREAMBLES			
	PAINT SPECIFICATIONS			
	All painting shall be done in accordance with Architect specifications unless otherwise described			
	COLOURS			
	Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell system in accordance with SANS 1091			
	ON METAL SURFACES			
	One coat metal primer and two coats Plascon Velvegro, on steel			
1	Covered walkways m2	130.80		
	Carried Forward to Summary of Section No. 10		R	
	Section No. 10 Bill No. 7 PAINTWORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			
				1

	SECTION SUMMARY - SECTION 10 : COVERED WALKWAYS				
Bill No		Page No		Amount	
1	EARTHWORKS (PROVISIONAL)	220			ļ
2	CONCRETE, FORMWORK AND REINFORCEMENT	223			
3	MASONRY	225			
4	WATERPROOFING	226			
5	ROOF COVERING	227			
6	METALWORKS	228			
7	PAINTWORK	229			
	Carried to Final Summary Section No. 10 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R		

Item No		Ī	Quantity	Rate	Amount	
	SECTION 12 : EXTERNAL WORKS	l,				
	BILL NO.1 - LANDSCAPING					
	Grassing					
	Grassing of rolls approximately 50mm thick including fertilising grassed areas after completion of planting					
1	"Kikuyu" grass over site	m2	1 034.24			
	<u>Trees</u>					
2	Feature trees 50lt, Type 1 as per Architects Specifications	No	10.00			
	Vegatable Garden					
3	Vegatable Garden Complete	No	1.00			
	<u>Fencing</u>					
4	Making good existing fence	m	800.00			
5	New Fence to Grade R Play Area	m	50.00			
6	Gate 01	No	1.00			
	Sports Fields					
7	Combi Court		Item			
	Playground and Jungle Gyms					
8	CONCRETE SLAB: 3000mm x 5000mm cast on site as per specialist specification or detailed drawings. (Or equal approved). Games to be painted in suitable water resistant and hardwearing product (colours and designs to be specified later) and concrete to be sealed with a high-quality matte, clear concrete sealant as per specialist specification. (Or equal approved)		Item			
	Carried Forward Section No. 11 Bill No. 1 EXTERNAL WORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		_

	Brought Forward			R	1
9	SAND PIT: Add-ons range sand pit from Playgroundworld. Timber to be treated and sufficient drainage ground sheet to be used. Installation as per specialist specification and detailed drawings. (Or equal approved).		ltem		
10	BALANCING BRIDGE: 4500mm x 900mm x 1200mm steel balancing bridge from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and detailed drawings. (Or equal approved).	No	1.00		
11	4-SEATER ROUNDABOUT: 1500mm x 1500mm steel 4-seater roundabout from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and details drawings. (Or equal approved).	No	1.00		
12	TUNNEL CLIMB DRUM: 1500mm x 900mm x 1000mm steel tunnel climb drum from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and details drawings. (Or equal approved).				
		No	4.00		ı
13	2-SEATER ROCKER: 1800mm x 600mm x 750mm steel 2-seater rocker from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and details drawings. (Or equal approved).				
		No	1.00		ı
14	SWING: 4500mm x 2400mm x 3000mm steel frame triple swing from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and details drawings. (Or equal approved).				
		No	1.00		ı
					_
	Carried Forward			R	ı
	Section No. 11 Bill No. 1				1
	EXTERNAL WORK Tshedimoso Elemental Estimate Rev02				l
	Stage 3 - Elemental Estimate				ı
					ı

	Brought Forward		Ī	R	
15	JUNGLE GYM: 2200mm x 1800mm x 2500mm combination gym cube from Planet Jungle Gym called Mercury. 2400mm Slide to be added. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and details drawings. (Or equal approved).				
		No	1.00		
16	HOPSCOTCH LAYOUT: Standard 450mm x 450mm x 50mm concrete paver slabs laid out for the game of hopscotch. Finish: Smooth. Colour: Charcoal. Numbers to be painted in a suitable water-resistant and hardwearing product (colours to be specified later) and pavers to be sealed with a high quality matte, clear paver sealant as per specialist specification. (Or equal approved).		Item		
17	LITTER BIN: 90lt small raintop pavement litter bin from SA Bins. 470mm x 470mm x 675mm (colour to be specified later). (Or equal approved)				
	оросинов имену (Ст. один. арристов)	No	3.00		
18	DRINKING FOUNTAIN: 500mm x 740mm standard drinking fountain from SA Bins. Fibreglass basin and stainless steel tap. 110mm diameter hole for water supply connection. Installed as per specialist specification and details drawings. (Or equal approved).	No	5.00		
19	LITTER BIN: 218lt large raintop pavement litter bin from SA Bins. 493mm x 493mm x 934mm (colour to be specified later). (Or equal approved)	No	2.00		
20	MERRY-GO-ROUND: 2500mm x 2500mm x 1000mm heavy duty merry-go-round from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and detailed drawings. (Or equal approved).	No	1.00		
	Carried Forward  Section No. 11  Bill No. 1  EXTERNAL WORK  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward	1		R	
21	MONKEY BARS: 2000mm x 1000mm x 1800mm steel Super Monkey Bars from Planet Jungle Gym. Steel to be galvanised and painted (colour to be specified later) and installed as per specialist specification and detailed drawings. (Or equal approved).	No	1.00		
22	SEATING: 1200MM x 400mm x 420mm standard concrete bench from Bosun. Finish: Standard. Installed as per specialist specification and detailed drawings. (Or equal approved).	No	14.00		
23	PATHWAY: Onyx Piazza Paver 220mm x 52mm x 50mm laid in accordance to manufactures specification and detail drawings. (Or equal approved).	m2	78		
	Carried to Final Summary Section No. 11			R	
	Bill No. 1 EXTERNAL WORK Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 13 : DECANTING & DEMOLISHING				
	BILL NO.1 - DECANTING & DEMOLISHING				
	DECANTING				
	Temporary Structures				
1	Montly Rental of x2 (3m x 6m) Ablution Blocks (Male & Female)	Month	10.00		
2	Establishment Costs	No	1.00		
3	De-establishment Costs	No	1.00		
4	Monthly Rental of x1 (3m x 6m) Open Plan Kitchen	Month	10.00		
5	Establishment Costs	No	1.00		
6	De-establishment Costs	No	1.00		
7	Temporary Hoarding	m	256.00		
	<u>Demolition</u>				
8	Demolition of existing kitchen	m2	173.40		
9	Demolition of all existing concrete slabs, existing water tank, water fountain, existing play area		Item		
10	Demolition of existing steel carport		Item		
	Carried to Final Summary Section No. 12			R	
	Bill No. 1 DECANTING & DEMOLITION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 14 : ELEVATED TANK BASES				
	BILL NO.1 - EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The tenderer acquaint himself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to included all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured.				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto truck directly from the excavation or alternatively, from stock piles situated on the building site				
	Excavation				
	No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling. " Soft rock" and "hard rock" shall be as defined in "Earthworks"				
	Note: Tenderer are advised to study the Model Preambles for Trades before pricing this bill				
	EXCAVATIONS				
	Excavations in earth not exceeding 2m deep				
1	Foundations m3	49.97			
	Extra over all excavations for carting away				
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor m3	21.97			
					_
	Carried Forward		R		
	Section No. 13 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Keeping excavations free of water				
3	Keeping excavations free of water other than subterranean water (Proven Method and Expenditure)		Item		
	FILLING				
	Earth filling obtained from excavations and/or prescribed stock piles on site, compacted in 100mm layers to 93% Mod AASHTO density				
4	Backfilling to strip footings, bases etc	m3	28.00		
	Earth filling obtained from commercial sources				
5	Selected (G5) layers constructed to 150 mm thickness compact to 95% of mod. AASHTO maximum density	m3	11.53		
	Compaction of surfaces				
6	To loosen excavated surface and re-compact ground surface under strip footings and surface bed etc. by wetting and compacting to 93% Mod AASTHO	m2	38.44		
	Prescribed density tests on filling				
7	"Modified AASTHO Density" test	No	8.00		
	SOIL POISONING				
	Soil insecticide in accordance with Architects Specifications				
8	Under floors etc including forming and poisoning shallow furrows against foundations walls etc. filling and ramming	m2	38.44		
9	To bottoms and sides of trenches etc	m2	16.12		
	Carried Forward to Summary of Section No. 13			R	
	Section No. 13 Bill No. 1 EARTHWORKS (PROVISIONAL) Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount
	SECTION 14 : ELEVATED TANK BASES			
	BILL NO.2 - CONCRETE, FORMWORK AND REINFORCEMENT			
	SUPPLEMENTARY PREAMBLES			
	Cost of test			
	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)			
	<u>Formwork</u>			
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse			
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES			
	25Mpa/19mm Concrete			
1	Strip footings and Column Bases m3	16.05		
	Comical Forward		D	
	Section No. 13 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R	

	Brought Forward			R	
	TEST CUBES				
2	Allow for all necessary concrete test cubes size 150 x 150 mm cast from batches of concrete required for the entire contract as specified, made, stored, cured and tested in accordance with SABS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Representative/Agent. One set consist of 6no. 150x150mm cubes	Set	2.00		
	CONCRETE SUNDRIES				
	Finishing top of surface bed smooth with a wood float				
3	Columns	m2	1.75		
	REINFORCEMENT				
	Mild steel reinforcement for structural concrete work				
4	8mm diameter bars	t	0.10		
	High tensile reinforcement for structural concrete work				
5	12mm Diameter bars	t	1.36		
	Carried Forward to Summary of Section No. 13 Section No. 13 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Tshedimoso Elemental Estimate Rev02			R	
	Stage 3 - Elemental Estimate				

	SECTION SUMMARY - SECTION 14 : ELEVATED TANK BASES				
Bill No		Page No		Amount	
1	EARTHWORKS (PROVISIONAL)	237			
2	CONCRETE, FORMWORK AND REINFORCEMENT	239			
	Carried to Final Summary		R		
	Section No. 13 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				_
				l I	

Item No			Quantity	Rate	Amount
	SECTION 15 : CIVIL ENGINEERING (WATER & SEWER)	\ <b>!</b>			
	BILL NO.1 - SITE CLEARANCE				
	SEWER NETWORK				
1	Clear and grub of site and remove all obstructions on pipeline route up to 2.5m wide	m	300.00		
	Remove and grub large trees and stumps				
2	a) Girth over 600mm up to 1000mm (provisional)	No	3.00		
3	b) Girth over 1000mm up to 2000mm (provisional)	No			Rate Only
4	c) Girth over 2000mm up to 3000mm (provisional)	No			Rate Only
	WATER RETICULATION				
5	Clear and grub of site and remove all obstructions on pipeline route up to 2.5m wide	m	420.00		
	Remove and grub large trees and stumps				
6	a) Girth over 600mm up to 1000mm (provisional)	No	3.00		
7	b) Girth over 1000mm up to 2000mm (provisional)	No			Rate Only
8	c) Girth over 2000mm up to 3000mm (provisional)	No			Rate Only
	Carried Forward to Summary of Section No. 14			R	
	Section No. 14 Bill No. 1				
	SITE CLEARANCE				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
1	SECTION 15 : CIVIL ENGINEERING (WATER & SEWER)	3			
	BILL NO.2 - WATER NETWORK & SUPPLY				
	EXCAVATION				
1	Excavate in all materials for valve boxes, backfill & compact and dispose of surplus or unsuitable material.	m3	30.00		
	Excavate in all materials for trenches, backfill, compact and dispose of surplus or unsuitable material for water pipes to a depth not exceeding 1.5 m				
2	For 63mm uPVC CL9 diameter pipes 700mm wide	m	340.00		
3	For 110mm uPVC CL9 diameter pipes 1000mm wide	m	70.00		
4	For 160mm uPVC CL9 diameter pipes 1000mm wide	m	10.00		
5	For 25mm and 20mm diameter HDPE PN9 pipes 300mm wide	m	50.00		
6	Extra over item for hard rock excavation	m3	10.00		
	PROVISION OF BEDDING				
7	Selected granular bedding material from site excavation max size > 6.0 mm	m3	460.00		
8	Selected fill material from site excavation, max size >6 mm	m3	460.00		
	Imported from commercial sources (provisional) - graded G7				
9	Import filling material to make up short fall due to rock excavation and spoil	m	100.00		
	MEDIUM PRESSURE PIPELINES				
	Carried Forward Section No. 14 Bill No. 2 WATER NETWORK & SUPPLY			R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Supply, handle, lay and bed uPVC Class 9, test and disinfect.				
10	63mm uPVC CL9 dia	m	340.00		
11	110mm uPVC CL9 dia	m	70.00		
12	160mm uPVC CL9 dia	m	10.00		
	Supply, handle, lay and bed HDPE pipes with couplings complete for house connections, test and disinfect				
13	20 mm dia	m	25.00		
14	25 mm dia	m	25.00		
	Water Point construction with all fittings per engineers details				
15	Provisional allowance		Item		
	SPECIALS AND FITTINGS FOR uPVC CL 9 PIPES				
	Extra-over Item 3.3 for the supply, lay and bed fittings.				
	Bends : uPVC				
16	11,25" 63mm dia uPVC CL9	No	2.00		
17	22,5" 63mm dia uPVC CL9	No	2.00		
18	45" 63mm dia uPVC CL9	No	2.00		
19	90" 63mm dia uPVC CL9	No	8.00		
20	90" 110mm dia uPVC CL9	No	2.00		
	uPVC Tees				
21	63mm dia uPVC CL9	No	5.00		
22	110mm dia uPVC CL9	No	2.00		
	Carried Forward Section No. 14 Bill No. 2 WATER NETWORK & SUPPLY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
23	160mm dia uPVC CL9	No	1.00		
	Stub End with SANS 1123/3 flange class 9 (backing ring supplier) at valves				
24	63mm dia	No	16.00		
25	110mm dia	No	10.00		
	VALVES (AVK or similar approved)				
	Supply & install resilient seal gate valves, non rising spindle, cap top, LH closing to SANS 665, flanged to SANS 1123/3 table 16				
26	63mm dia	No	8.00		
27	110mm dia	No	5.00		
	Denso wrapping at valves				
28	63mm and 110mm dia valve	No	26.00		
29	Supply and install 750 Ø MH valve boxes for 63mm to 100mm dia valves	No	13.00		
	uPVC Reducers CL9				
30	110mm to 63mm diamter	No	4.00		
31	160mm to 110mm diameter	No	2.00		
32	M20/19 concrete anchor blocks for water pipes including all shuttering excavation, etc as shown on drawings	m3	40		
	CONNECTIONS				
	Supply and install saddles for erf connections Saddles to fit the following pipes:				
33	63mm diameter	No	15.00		
34	20mm and 25mm diameter HDPE connection pipes	m	50.00		
	Carried Forward Section No. 14 Bill No. 2 WATER NETWORK & SUPPLY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	-				

ĺ	Brought Forward		R	
35	Supply and installation of domestic watermeter.	Item		5 000.00
36	Borehole Refurbishment	Item		20 000.00
37	Storage Steel Water Tanker	Item		350 000.00
38	Borehole Testing	Item		45 000.00
39	Supply and Install KSB MOVITEC VF2/03 B or similar approved complete with all fittings.	Item		66 000.00
	Carried Forward to Summary of Section No. 14		R	
	Section No. 14 Bill No. 2 WATER NETWORK & SUPPLY Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
	SECTION 15 : CIVIL ENGINEERING (WATER & SEWER)	1			
	<u>EARTHWORKS</u>				
1	Excavate in all materials for manholes	m3	200.00		
	EARTHWORKS PIPE TRENCHES				
	Excavate in all materials for trenches up to 1m wide, backfill, compact and dispose of surplus or unsuitable material for 110mm diameter pipes over and up to:				
2	0.0m to 1.5m	m	140.00		
3	>1,5m to 2.0m	m	110.00		
4	>2m to 3.5m	m	50.00		
5	Extra over item for hard rock excavation	m3	50.00		
	PROVISIONAL FOR BEDDING				
6	Selected granular bedding material from site excavation max size >6.0mm	m3	110.00		
7	Selected fill material from site excavation, max size >10mm	m3	110.00		
8	Import filling material to make up short fall due rock excavation and spoil	m3	50.00		
	SEWERS (PIPEWORK)				
	Supply, lay and test uPVC Class 34 Heavy Duty pipe in 6m lengths, excluding couplings				
9	110mm diameter	m	300.00		
	MANHOLES				
	Carried Forward Section No. 14 Bill No. 3 SEWER RETICULATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward	1		R	
	Supply factory manufactured concrete manholes with Polyester Resin frame and covers to SANS 50124, with floor and benching for the following diameters and depths:				
	1250mm diameter two legged manhole				
10	0.0m to 1.5m	No	4		
11	>1,5m to 2.0m	No	4		
12	>2m to 3.5m	No	3		
	1250mm diameter three legged manhole				
13	0.0m to 1.5m	No	4		
14	>1,5m to 2.0m	No			Rate only
15	Rodding eye complete with concrete collar and lid	No	9		
16	G5 cement stabilized layer under MH foundation	m3	10.00		
17	Cement of stabilizing	t	0.50		
18	25/6.7 Mpa concrete in bottom of MH - MH to be turned upside down and concrete poured	m3	10.00		
19	Y10 high tensile steel bars in manhole bottom	t	1.00		
	CONNECTIONS				
	Construct Type 1 connections complete as detailed and specified on drawings connecting to main sewer for depths not exceeding 1.5m on the following pipes:				
20	Direct in MH	No	5		
21	From 110mm diameter uPVC Heavy Duty Class 34	No	10		
	Carried Forward Section No. 14 Bill No. 3 SEWER RETICULATION			R	
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Construct Type 2 connections complete as detailed and specified on drawings connecting to main sewer for depths not exceeding 2.5m on the following pipes:				
22	Direct in MH	No			Rate only
23	From 110mm diameter uPVC Heavy Duty Class 34	No			Rate only
	Construct Type 3 connections complete as detailed and specified on drawings connecting to main sewer for depths not exceeding 5.0m on the following pipes:				
24	Direct in MH	No			Rate only
25	From 110mm diameter uPVC Heavy Duty Class 34	No			Rate only
	<u>Testing</u>				
26	Make provision for testing water tightness of manholes including all work and materials as specified only where instructed by the Engineer	No	15		
	HDPE Y-piece at connections				
27	110mm diameter x 110mm diameter	No	30		
	Carried Forward to Summary of Section No. 14 Section No. 14 Bill No. 3 SEWER RETICULATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	SECTION SUMMARY - SECTION 15 : CIVIL ENGINEERING (WATE				
Bill No		Page No		Amount	
1	SITE CLEARANCE	241			
2	WATER NETWORK & SUPPLY	245			
3	SEWER RETICULATION	248			
	Carried to Final Summary		R		
	Section No. 14 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	<u>SECTION 16 : CIVIL ENGINEERING (ROADS &amp; STORMWATER)</u>				
	BILL NO.1 - SITE CLEARANCE				
	OPEN CHANNEL				
1	Clear and grub of site	m2	194		
	Remove and grub large trees and stumps				
2	a) Girth over 1000mm up to 2000mm (provisional)	No			Rate Only
3	b) Girth over 2000mm up to 3000mm (provisional)	No			Rate Only
	PARKING				
4	Clear and grub of site	m2	670		
	Remove and grub large trees and stumps				
5	a) Girth over 1000mm up to 2000mm (provisional)	No			Rate Only
6	b) Girth over 2000mm up to 3000mm (provisional)	No			Rate Only
	Carried Forward to Summary of Section No. 15			R	
	Section No. 15 Bill No. 1				
	SITE CLEARANCE				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 16 : CIVIL ENGINEERING (ROADS & STORMWATER)				
	BILL NO.1 - ROADS & STORMWATER				
	EARTHWORKS (ROADS, SUBGRADE)				
	a) Roadbed preparation and compaction of material to				
1	i) minimum of 90% mod. AASHTO maximum density	m3	110.57		
2	Selected layer (G7) compacted to 95% of mod.  AASHTO maximum	m3	110.57		
3	Overhaul (m3/km)	m3	110.57		
	GABIONS AND PITCHING				
	Surface preparation for bedding of gabions				
4	a) Cavities filled with approved excavated material or rock	m3	4.00		
	CONCRETE (SMALL WORKS)				
5	High-Tensile Welded Mesh (REF. 395)	m2	1.08		
6	30 Mpa/19 mm (refer to DWG KB043/DBSA-NW- TPS/SW-SD-001)	m3	1.19		
	STORMWATER DRAINAGE				
	Carried Forward Section No. 15 Bill No. 2 ROADS & STORMWATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
!!	Alternative to Subclause 8.2.8				
7	(a) 230mm thick	m2	1.66		
	Accessories				
8	(b) Grid inlets including frames (600x600 light duty square dish	No	1.00		
	SUBBASE				
	Construct the subbase course/shoulders/gravel wearing course with material from commercial sources				
	(a) Gravel subbase (unstabilised gravel) compacted to				
9	i) minimum of 98% mod. AASHTO maximum density	m3	110.57		
	Process (C4) subbase material by the following processes, as relevant, and use in the subbase				
10	(d) Stabilisation	m3	110.57		
	Stabilising agent				
11	(b) Portland cement	t	46.77		
	Carried Forward  Section No. 15  Bill No. 2  ROADS & STORMWATER  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	SEGMENTED PAVING				
12	Provision of Edge Restraints			SUM	
13	(b) 80mm	m2	851.40		
14	Cutting Units to Fit Edge Restaints	m	369		
15	(b) Portland cement	t	58.45		
	KERBING AND CHANNELING				
	Concrete kerbing				
	(a) Fig. 4				
16	(i) 330 mm	m	46.83		
17	(ii) 1000 mm	m	187.31		
	(a) Fig. 4				
18	(i) 330 mm	m	139.00		
19	(ii) 1000 mm	m	463.32		
	Trimming of Excavations for Concrete-Lined Open <u>Drains in</u>				
20	(a) Soft material	m2	324.03		
	Carried Forward			R	
	Section No. 15 Bill No. 2 ROADS & STORMWATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
			l		

	Brought Forward			R	
21	Sealed Joints in Concrete Lining of Open Drains	m	427.72		
22	Sprayed Bitumen Emulsion Primer for Concrete-Lined Open Drains	m2	27.06		
	ANCILLARY ROADWORKS				
	Sign Faces with Painted or Galvanized (as Stated) Background, with Painted Symbols, Characters, Legend, and Borders, and with Signboards Constructed from				
	(a) Aluminium sheet (2.0 mm thick), of area				
23	(i) Up to 2 m2	m2	5		
	Sign Supports				
24	(a) Steel tubing (110 mm dia, 2.5 mm wall thickness)	t	0.10		
	Excavation and Backfilling and Concreting for Sign Supports				
25	(a) Backfill	m3	2.35		
26	(b) Class 20/19 concrete	m3			Rate Only
	Carried Forward Section No. 15 Bill No. 2 ROADS & STORMWATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Setting out and premarking				
27	Lines (excluding traffic island markings, characters, and symbols)	m	350.00		
	Carried Forward to Summary of Section No. 15 Section No. 15 Bill No. 2 ROADS & STORMWATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

Item No		Quantity	Rate	Amount
	SECTION 16 : CIVIL ENGINEERING (ROADS & STORMWATER)			
	BILL NO.1 - EARTHWORKS			
	<u>EARTHWORKS</u>			
1	Clear and grub of site m2	9 000.00		
2	Remove topsoil to nominal depth 150 mm m2	9 000.00		
	Selected (G5) layers constructed to 150 mm thickness			
3	a) Compact to 95% of mod. AASHTO maximum density m3	1 040.60		
	Cut to spoil			
4	a) Soft excavations m3	5 991.00		
5	Overhaul (m3/km) m3	5 991.00		
	Carried Forward to Summary of Section No. 15 Section No. 15 Bill No. 3 EARTHWORKS Tshedimoso Elemental Estimate Rev02		R	
	Stage 3 - Elemental Estimate			

	SECTION SUMMARY - SECTION 16: CIVIL ENGINEERING (ROAD				
Bill No		Page No		Amount	
1	SITE CLEARANCE	250			
2	ROADS & STORMWATER	255			
3	EARTHWORKS	256			
	Carried to Final Summary		R		
	Section No. 15 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount	Ī
	SECTION 17: ELECTRICAL ENGINEERING			ii		
	BILL NO 1: BULK SUPPLY & RETICULATION & ESKOM UPGRADE CONTRIBUTION					
	The complete installation must comply SANS 0142 specifications and the Quality specification in this document. Therefore Tenders are advised to study the specification and drawings before the Bill is to be price.					
	BULK SUPPLY					
1	Allow a Provisional Sum for upgrading of Service Connection based on Eskom tariff Plan bulk Engineering Contributions (100kVA).			SUM		
2	Supply and install municipal distribution kiosk (metering kiosk) as per schematic diagram. The distribution kiosk shall comply with the Eskom requirements. The rate shall include meter and plinth.	EACH	1.00			
	CABLES, CONDUCTORS & SLEEVES					
	Supply and install PVC insulated amoured copper cables					
3	70mm2 4 x core PVC insulated copper cable (For incoming municipal supply, supply cable from the boundary kiosk to the main distribution board )	m	50.00			
4	16mm2 4 core PVC insulated copper cable	m	300.00			
5	16mm2 3 core PVC insulated copper cable	m	350.00			
	Supply and install bare copper earth conductor					
6	35mm2 bare copper earth cable	m	50.00			
7	10mm2 bare copper earth cable	m	300.00			
8	6mm2 bare copper earth cable	m	350.00			
						_
	Carried Forward Section No. 16 Bill No. 1 BULK SUPPLY & RETICULATION & ESKOM UPGRADE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
	GLANDS AND SHROUDS				
9	70mm2 4 x core PVC insulated copper cable	EACH	2.00		Rate Only
10	16mm2 4 core PVC insulated copper cable	EACH	8.00		
11	16mm2 3 core PVC insulated copper cable	EACH	10.00		
	GLANDS AND SHROUDS (Earth bare)				
12	35mm2 bare copper earth cable	EACH	2.00		
13	10mm2 bare copper earth cable	EACH	8.00		
14	6mm2 bare copper earth cable	EACH	10.00		
	CABLE MARKERS & WARNING TAPES				
15	Cable markers for cable routes indication	EACH	20.00		
16	Cable warning tape	m	400.00		
	SUPPLY & INSTALL PVC SLEEVES				
17	110 diameter	m	100.00		
18	50 diameter	m	100.00		
	TRENCHING AND EXCAVATIONS (600mm wide & 800mm deep). Rate to include bedding and backfilling				
19	Pickable soil	m3	192.00		
20	Soft rock	m3	20.00		
21	Hard rock	m3	20.00		
22	Install 600x600x800mm manhole (provision)	EACH	5.00		
	Carried Forward to Summary of Section No. 16			R	
	Section No. 16 Bill No. 1 BULK SUPPLY & RETICULATION & ESKOM UPGRADE Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			, ,	

Item No			Quantity	Rate	Amount
	SECTION 17: ELECTRICAL ENGINEERING				
	BILL NO 2 : BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLATION				
	The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
	CONDUITS				
	Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:				
1	20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	850.00		
2	20mm diameter copex conduit	m	50.00		
	Supply and install steel galvanised walls boxes complete with all accessories				
3	100mm x 50mm x 50mm deep	EACH	60.00		
4	100mm x 100mm x 50mm deep	EACH	100.00		
5	Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	850.00		
6	Supply and install 100mm x 100mm blank cover plates	EACH	10.00		
7	Supply and install 4 way PVC round boxes	EACH	200.00		
8	Supply and install 100mm X 50 blank plates	EACH	10.00		
	ELECTRICAL CABLE MANAGEMENT & TRUNKING				
	Supply, Install, Test and Commission				
	Carried Forward Section No. 16 Bill No. 2 BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLA Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate	ſ		R	
	Otago o - Elementai Estimate				

	Brought Forward			R	
l	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	60.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m	10.00		
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
13	Supply and install main distribution board (DB-B1) as per the schematic diagram and specifications. The distribution board will be surface mounted in the duct provided. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	1 500.00		
15	4mm2	m	100.00		
16	6mm2	m	100.00		
	Carried Forward Section No. 16 Bill No. 2 BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLA Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Earth Wire				
17	2.5mm2	m	800.00		
18	4mm2	m	50.00		
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	25.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	1.00		
21	Supply and install 230V, 16A double switched socket outlets	EACH	10.00		
22	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH	8.00		
23	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH	8.00		
	Carried Forward Section No. 16 Bill No. 2 BLOCK 1: ADMIN BUILDING- ELECTRICAL INSTALLA Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
24	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necesssary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under ICT.	EACH			
25	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	65.00		
	SWITCHES				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
26	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	20.00		
27	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH	1.00		
28	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH	6.00		
29	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
30	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).  Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH	1.00		
	Carried Forward Section No. 16 Bill No. 2 BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLA Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
31	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH	1.00		
32	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH	2.00		
33	Supply and install 230V, 30A double pole isolator flush mounted in the wall for intercome control panel	EACH	2.00		
34	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for siren. Rates to include 4 inch x 4 inch extension box	EACH	2.00		
	LUMINAIRES				
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead				
35	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	30.00		
36	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	28.00		
37	Type D (Surface mounted 30W LED flood light fitting)	EACH	3.00		
38	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
39	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH	1.00		
	TELECOMMUNICATION AND DATA				
40	RJ11 cover plate on the wall or Power skirting	EACH	10.00		
41	RJ45 cover plate on wall or Power skirting	EACH	10.00		
	Carried Forward  Section No. 16  Bill No. 2  BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLA  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
42	450mm x 300mm x 125mmdeep telephone wall box	EACH	1.00		
	TESTING AND COMMISSIONING				
43	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 2 BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLA Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	<del></del>

Item No			Quantity	Rate	Amount	
	SECTION 17: ELECTRICAL ENGINEERING					
	BILL NO 3 : BLOCK 8 : DINNING ROOM & NUTRITION CENTRE : ELECTRICAL INSTALLATION					
	The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.					
	CONDUITS					
	Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:					
1	20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	600.00			
2	20mm diameter copex conduit	m	100.00			
	Supply and install steel galvanised walls boxes complete with all accessories					
3	100mm x 50mm x 50mm deep	EACH	50.00			
4	100mm x 100mm x 50mm deep	EACH	100.00			
5	Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	600.00			
6	Supply and install 100mm x 100mm blank cover plates	EACH	5.00			
7	Supply and install 4 way PVC round boxes	EACH	150.00			
8	Supply and install 100mm X 50 blank plates	EACH	5.00			
	ELECTRICAL CABLE MANAGEMENT & TRUNKING					
	Supply, Install, Test and Commission					
	Carried Forward  Section No. 16  Bill No. 3  BLOCK 2 : DINNING ROOM & NUTRITION CENTRE- E  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
1	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	60.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m			
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
13	Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	1 000.00		
15	4mm2	m	600.00		
16	6mm2	m	100.00		
	Carried Forward Section No. 16 Bill No. 3 BLOCK 2: DINNING ROOM & NUTRITION CENTRE- E Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
l	Earth Wire				
17	2.5mm2	m	800.00		
18	4mm2	m	50.00		
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	10.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	2.00		
21	Supply and install 230V, 16A double switched socket outlets	EACH	15.00		
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH			
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necessary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under ICT.	EACH			
	Carried Forward  Section No. 16  Bill No. 3  BLOCK 2 : DINNING ROOM & NUTRITION CENTRE- E  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
24	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	50.00		
	<u>SWITCHES</u>				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	12.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH	2.00		
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH	2.00		
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH	2.00		
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH	4.00		
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH	2.00		
	<u>LUMINAIRES</u>				
	Carried Forward Section No. 16 Bill No. 3 BLOCK 2: DINNING ROOM & NUTRITION CENTRE- E Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead				
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	28.00		
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	18.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH			
38	RJ45 cover plate on wall or Power skirting	EACH			
39	450mm x 300mm x 125mmdeep telephone wall box	EACH			
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 3 BLOCK 2: DINNING ROOM & NUTRITION CENTRE- E Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount
	SECTION 17: ELECTRICAL ENGINEERING				
	BILL NO 4 : BLOCK 3 : MULTI-MEDIA- ELECTRICAL INSTALLATION				
	The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
	CONDUITS				
	Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:				
1	20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	500.00		
2	20mm diameter copex conduit	m	100.00		
	Supply and install steel galvanised walls boxes complete with all accessories				
3	100mm x 50mm x 50mm deep	EACH	50.00		
4	100mm x 100mm x 50mm deep	EACH	100.00		
5	Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	500.00		
6	Supply and install 100mm x 100mm blank cover plates	EACH	5.00		
7	Supply and install 4 way PVC round boxes	EACH	120.00		
8	Supply and install 100mm X 50 blank plates	EACH	5.00		
	ELECTRICAL CABLE MANAGEMENT & TRUNKING				
	Supply, Install, Test and Commission				
	Carried Forward			R	
	Section No. 16 Bill No. 4 BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Brought Forward			R	
Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
P9000 Unistrut	m	32.00		
P8000 Unistrut	m			
P2000 Unistrut	m			
Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
Cabstrut N8/P803, 2-way with 2 cover plates & divider	m	12.00		
DISTRIBUTION BOARDS (Refer to schematic diagrams)				
Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
CONDUCTORS				
Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
2.5mm2	m	500.00		
4mm2	m	1 000.00		
6mm2	m	50.00		
Carried Forward Section No. 16 Bill No. 4 BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).  P9000 Unistrut  P8000 Unistrut  P2000 Unistrut  Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)  Cabstrut N8/P803, 2-way with 2 cover plates & divider  DISTRIBUTION BOARDS (Refer to schematic diagrams)  Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board  CONDUCTORS  Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)  2.5mm2  Amm2  Carried Forward  Section No. 16  Bill No. 4  BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees. Bends. 4 ways, ends and all other accessories).  P9000 Unistrut mm  P8000 Unistrut mm  P2000 Unistrut mm  Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)  Cabstrut N8/P803, 2-way with 2 cover plates & divider mm  DISTRIBUTION BOARDS (Refer to schematic diagrams)  Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board  CONDUCTORS  Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2,5mm² earth conductors)  2.5mm2 mm  Carried Forward  Section No. 16  Bill No. 4  BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).  P9000 Unistrut m m 32.00  P8000 Unistrut m m  P2000 Unistrut m m  P3200 Unis	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).  P9000 Unistrut m m 32.00  P8000 Unistrut m m  Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)  Cabstrut N8/P803, 2-way with 2 cover plates & divider m 12.00  DISTRIBUTION BOARDS (Refer to schematic diagrams)  Supply and install distribution board as per the schematic diagram and specifications. The distribution board diors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board  CONDUCTORS  Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For scoket outlet circuits the wiring shall comprise of 4 mm² conductors with 2,5mm² earth conductors.  Carried Forward m 500.00  Carried Forward R  Section No. 16  Bill No. 4  BLOCK 3: MULTI MEDIA CENTRE-ELECTRICAL INST TShedimoso Elemental Estimate Rev02

	Brought Forward			R	
l	Earth Wire				
17	2.5mm2	m	750.00		
18	4mm2	m	25.00		
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	2.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	5.00		
21	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH	30.00		
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH	30.00		
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necessary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under ICT.	EACH			
		5.1			
	Carried Forward Section No. 16 Bill No. 4 BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
24	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	25.00		
	<u>SWITCHES</u>				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	3.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH	1.00		
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH			
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH			
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH	2.00		
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH			
	LUMINAIRES				
	Carried Forward Section No. 16 Bill No. 4 BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead	3			
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	15.00		
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	6.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH	1.00		
38	RJ45 cover plate on wall or Power skirting	EACH	12.00		
39	450mm x 300mm x 125mmdeep telephone wall box	EACH	1.00		
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 4 BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INST Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount
	SECTION 17: ELECTRICAL ENGINEERING				
	BILL NO 5 :BLOCK 4 GRADE-R : ELECTRICAL INSTALLATION				
	The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
	CONDUITS				
	Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:				
1	20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	200.00		
2	20mm diameter copex conduit	m	50.00		
	Supply and install steel galvanised walls boxes complete with all accessories				
3	100mm x 50mm x 50mm deep	EACH	50.00		
4	100mm x 100mm x 50mm deep	EACH	50.00		
5	Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	200.00		
6	Supply and install 100mm x 100mm blank cover plates	EACH	2.00		
7	Supply and install 4 way PVC round boxes	EACH	50.00		
8	Supply and install 100mm X 50 blank plates	EACH	2.00		
	ELECTRICAL CABLE MANAGEMENT & TRUNKING				
	Supply, Install, Test and Commission				
	Carried Forward Section No. 16			R	
	Bill No. 5 BLOCK 4: GRADE R- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	24.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m			
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
13	Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	500.00		
15	4mm2	m	100.00		
16	6mm2	m			
	Carried Forward Section No. 16 Bill No. 5 BLOCK 4: GRADE R- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
	Earth Wire				
17	2.5mm2	m	300.00		
18	4mm2	m			
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	2.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	3.00		
21	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH			
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH			
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necesssary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under ICT.	EACH			
	Carried Forward Section No. 16 Bill No. 5 BLOCK 4: GRADE R- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
24	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	25.00		
	SWITCHES				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	5.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH			
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH			
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH			
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH	1.00		
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH			
	LUMINAIRES				
	Carried Forward			D	
	Section No. 16 Bill No. 5 BLOCK 4: GRADE R- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead				
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	11.00		
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	9.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH			
38	RJ45 cover plate on wall or Power skirting	EACH			
39	450mm x 300mm x 125mmdeep telephone wall box	EACH			
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		ltem		
	Corried Femulard to Summary of Section No. 16				
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 5 BLOCK 4: GRADE R- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	=

		Quantity	Rate	Amount
SECTION 17: ELECTRICAL ENGINEERING				
BILL NO 6: BLOCK 1 EXISITING CLASSROOM: ELECTRICAL INSTALLATION				
The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
CONDUITS				
Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:				
20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	300.00		
20mm diameter copex conduit	m	50.00		
Supply and install steel galvanised walls boxes complete with all accessories				
100mm x 50mm x 50mm deep	EACH	50.00		
100mm x 100mm x 50mm deep	EACH	50.00		
Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	300.00		
Supply and install 100mm x 100mm blank cover plates	EACH	2.00		
Supply and install 4 way PVC round boxes	EACH	50.00		
Supply and install 100mm X 50 blank plates	EACH	2.00		
ELECTRICAL CABLE MANAGEMENT & TRUNKING				
Supply, Install, Test and Commission				
Carried Forward Section No. 16 Bill No. 6 EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	BILL NO 6: BLOCK 1 EXISITING CLASSROOM: ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  20mm diameter copex conduit  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep  100mm x 100mm x 50mm deep  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:  Supply and install 100mm x 100mm blank cover plates  Supply and install 100mm X 50 blank plates  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward  Section No. 16 Bill No. 6 EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02	BILL NO 6 : BLOCK 1 EXISITING CLASSROOM : ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  m  20mm diameter copex conduit  m  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep  EACH 100mm x 100mm x 50mm deep  EACH Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:  m  Supply and install 100mm x 100mm blank cover plates  EACH Supply and install 4 way PVC round boxes  EACH Supply and install 100mm X 50 blank plates  EACH ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward  Section No. 16 Bill No. 6 EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02	SECTION 17: ELECTRICAL ENGINEERING  BILL NO 6: BLOCK 1 EXISITING CLASSROOM: ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  m 300.00  20mm diameter copex conduit m 50.00  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep EACH 50.00  100mm x 100mm x 50mm deep EACH 50.00  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves: m 300.00  Supply and install 100mm x 100mm blank cover plates EACH 2.00  Supply and install 4 way PVC round boxes EACH 50.00  Supply and install 100mm X 50 blank plates EACH 2.00  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward  Section No. 16  Bill No. 6  EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02	SECTION 17: ELECTRICAL ENGINEERING  BILL NO 6: BLOCK 1 EXISITING CLASSROOM: ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids m 300.00  20mm diameter copex conduit m 50.00  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep EACH 50.00  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves: m 300.00  Supply and install 100mm x 100mm blank cover plates EACH 2.00  Supply and install 4 way PVC round boxes EACH 50.00  Supply and install 100mm X 50 blank plates EACH 2.00  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward R  Section No. 16  Bill No. 6  EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS TShedimoso Elemental Estimate Rev02

	Brought Forward			R	
	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	60.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m			
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
13	Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	700.00		
15	4mm2	m	100.00		
16	6mm2	m			
	Carried Forward Section No. 16 Bill No. 6 EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Earth Wire				
17	2.5mm2	m	400.00		
18	4mm2	m			
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	8.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH			
21	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH			
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH			
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necesssary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under ICT.	EACH			
	Carried Forward  Section No. 16  Bill No. 6  EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
24	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	25.00		
	<u>SWITCHES</u>				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	4.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH			
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH			
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH			
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH			
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH			
	LUMINAIRES				
	Carried Forward Section No. 16 Bill No. 6 EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead				
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	24.00		
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	10.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH			
38	RJ45 cover plate on wall or Power skirting	EACH			
39	450mm x 300mm x 125mmdeep telephone wall box	EACH			
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 6 EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

		Quantity	Rate	Amount	
SECTION 17 : ELECTRICAL ENGINEERING					
BILL NO 7 : BLOCK 2 EXISTING CLASSROOM : ELECTRICAL INSTALLATION					
The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.					
CONDUITS					
Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:					
20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	300.00			
20mm diameter copex conduit	m	50.00			
Supply and install steel galvanised walls boxes complete with all accessories					
100mm x 50mm x 50mm deep	EACH	50.00			
100mm x 100mm x 50mm deep	EACH	50.00			
Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	300.00			
Supply and install 100mm x 100mm blank cover plates	EACH	2.00			
Supply and install 4 way PVC round boxes	EACH	50.00			
Supply and install 100mm X 50 blank plates	EACH	2.00			
ELECTRICAL CABLE MANAGEMENT & TRUNKING					
Supply, Install, Test and Commission					
Carried Forward Section No. 16 Bill No. 7 EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		
	BILL NO 7: BLOCK 2 EXISTING CLASSROOM: ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  20mm diameter copex conduit  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:  Supply and install 100mm x 100mm blank cover plates  Supply and install 4 way PVC round boxes  Supply and install 100mm X 50 blank plates  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward  Section No. 16 Bill No. 7 EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02	BILL NO 7 : BLOCK 2 EXISTING CLASSROOM : ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  m  20mm diameter copex conduit  m  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep  EACH 100mm x 100mm x 50mm deep  EACH Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:  m  Supply and install 100mm x 100mm blank cover plates  EACH Supply and install 4 way PVC round boxes  EACH Supply and install 100mm X 50 blank plates  EACH ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward  Section No. 16 Bill No. 7  EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02	SECTION 17 : ELECTRICAL ENGINEERING  BILL NO 7 : BLOCK 2 EXISTING CLASSROOM : ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  20mm diameter copex conduit  m 50.00  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep  EACH 50.00  100mm x 100mm x 50mm deep  EACH 50.00  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:  m 300.00  Supply and install 100mm x 100mm blank cover plates  EACH 2.00  Supply and install 100mm x 50 blank plates  EACH 50.00  Supply and install 100mm X 50 blank plates  EACH 2.00  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission	SECTION 17 : ELECTRICAL ENGINEERING  BILL NO 7 : BLOCK 2 EXISTING CLASSROOM : ELECTRICAL INSTALLATION  The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and install pipes including short lengths lointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids m 300.00  20mm diameter copex conduit m 50.00  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep EACH 50.00  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves: m 300.00  Supply and install 100mm x 100mm blank cover plates EACH 2.00  Supply and install 4 way PVC round boxes EACH 50.00  Supply and install 4 way PVC round boxes EACH 50.00  Supply and install 100mm X 50 blank plates EACH 2.00  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission  Carried Forward R  Section No. 16  Bill No. 7  EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02	SECTION 17 : ELECTRICAL ENGINEERING  BILL NO 7 : BLOCK 2 EXISTING CLASSROOM : ELECTRICAL INSTALLATION The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  CONDUITS  Supply and Install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:  20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids  m 300.00  20mm diameter copex conduit m 50.00  Supply and install steel galvanised walls boxes complete with all accessories  100mm x 50mm x 50mm deep EACH 50.00  Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves: m 300.00  Supply and install 100mm x 100mm blank cover plates EACH 2.00  Supply and install 4 way PVC round boxes EACH 50.00  Supply and install 100mm x 50 blank plates EACH 2.00  ELECTRICAL CABLE MANAGEMENT & TRUNKING  Supply, Install, Test and Commission

	Brought Forward			R	
	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	60.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m			
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
13	Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	700.00		
15	4mm2	m	100.00		
16	6mm2	m			
	Carried Forward Section No. 16 Bill No. 7 EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Earth Wire				
17	2.5mm2	m	400.00		
18	4mm2	m			
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	8.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH			
21	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH			
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH			
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necessary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under				
	ICT.	EACH			
	Carried Forward Section No. 16 Bill No. 7 EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

ĺ	Brought Forward			R	
24	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	25.00		
	SWITCHES				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	4.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH			
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH			
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH			
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH			
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH			
	LUMINAIRES				
	Carried Forward Section No. 16 Bill No. 7 EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead	-			
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	24.00		
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	10.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH			
38	RJ45 cover plate on wall or Power skirting	EACH			
39	450mm x 300mm x 125mmdeep telephone wall box	EACH			
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16			R	
	Section No. 16 Bill No. 7 EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INS Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 17 : ELECTRICAL ENGINEERING				
	BILL NO 8 : BLOCK 3 EXISTING ABLUTION: ELECTRICAL INSTALLATION				
	The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
	CONDUITS				
	Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:				
1	20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	150.00		
2	20mm diameter copex conduit	m	50.00		
	Supply and install steel galvanised walls boxes complete with all accessories				
3	100mm x 50mm x 50mm deep	EACH	25.00		
4	100mm x 100mm x 50mm deep	EACH	25.00		
5	Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	150.00		
6	Supply and install 100mm x 100mm blank cover plates	EACH	2.00		
7	Supply and install 4 way PVC round boxes	EACH	50.00		
8	Supply and install 100mm X 50 blank plates	EACH	2.00		
	ELECTRICAL CABLE MANAGEMENT & TRUNKING				
	Supply, Install, Test and Commission				
	Carried Forward Section No. 16 Bill No. 8 EXISTING ABLUTIONS- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	15.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m			
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
13	Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	500.00		
15	4mm2	m	50.00		
16	6mm2	m			
					L
	Carried Forward Section No. 16 Bill No. 8 EXISTING ABLUTIONS- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Earth Wire				
17	2.5mm2	m	275.00		
18	4mm2	m			
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	2.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH			
21	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH			
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH			
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necessary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under				
	ICT.	EACH			
	Carried Forward Section No. 16 Bill No. 8 EXISTING ABLUTIONS- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
24	Supply and install 5 Amp single un-switched Socket outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	25.00		
	<u>SWITCHES</u>				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	3.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH			
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH			
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 230V, 30A double pole isolator surface mounted in the ceiling void for geyser connection. Rates to include 4 inch x 4 inch extension box	EACH			
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH			
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH			
	<u>LUMINAIRES</u>				
	Carried Forward Section No. 16 Bill No. 8 EXISTING ABLUTIONS- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

	Brought Forward			R	
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead				
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH			
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	25.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH			
38	RJ45 cover plate on wall or Power skirting	EACH			
39	450mm x 300mm x 125mmdeep telephone wall box	EACH			
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16			R	
	Section No. 16 Bill No. 8 EXISTING ABLUTIONS- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 17 : ELECTRICAL ENGINEERING				
	BILL NO 9 : GUARDHOUSE & PUMP HOUSE: ELECTRICAL INSTALLATION				
	The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
	CONDUITS				
	Supply and install pipes including short lengths jointing, sweeping bends, buses, locknuts, roundboxes etc.:				
1	20mm diameter PVC pipe cast into concrete, brick work or suspended in ceiling voids	m	100.00		
2	20mm diameter copex conduit	m	20.00		
	Supply and install steel galvanised walls boxes complete with all accessories				
3	100mm x 50mm x 50mm deep	EACH	10.00		
4	100mm x 100mm x 50mm deep	EACH	20.00		
5	Supply and install 1,6mm diameter steel galvanised draw wires drawn into conduit/sleeves:	m	100.00		
6	Supply and install 100mm x 100mm blank cover plates	EACH	2.00		
7	Supply and install 4 way PVC round boxes	EACH	25.00		
8	Supply and install 100mm X 50 blank plates	EACH	2.00		
	ELECTRICAL CABLE MANAGEMENT & TRUNKING				
	Supply, Install, Test and Commission				
	Carried Forward Section No. 16 Bill No. 9 GUARDHOUSE- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Galvanised unistrut suspended from structure in the roof. Fixings not to exceed 4m including galvanized steel cover (Rates to include: Tees, Bends, 4 ways, ends and all other accessories).				
9	P9000 Unistrut	m	10.00		
10	P8000 Unistrut	m			
11	P2000 Unistrut	m			
	Power Skirting Aluminium:(To include All: elbows, corners sections, T-sections & end caps)				
12	Cabstrut N8/P803, 2-way with 2 cover plates & divider	m			
	DISTRIBUTION BOARDS (Refer to schematic diagrams)				
	Supply and install distribution board as per the schematic diagram and specifications. The distribution board will be flush mounted in the wall. The distribution board doors must have a neat and professionally manufactured cut-out, with reinforced and properly finished edges, so that the main isolator of the distribution board can be switched without opening the door in case of emergency. Distribution boards must lockable and padlocks must be supplied with the distribution board				
13	DB-B9	EACH	1.00		
	CONDUCTORS				
	Supply and install 600/1000Volt PVC insulated stranded copper conductors drawn into conduits, etc. (Wiring for lighting circuits is to be carried out with 2,5mm² conductors and 2,5mm² earth conductors. For socket outlet circuits the wiring shall comprise of 4 mm² conductors with 2, 5mm² earth conductors)				
14	2.5mm2	m	300.00		
15	4mm2	m	300.00		
	Carried Forward Section No. 16 Bill No. 9 GUARDHOUSE- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
					I

	Brought Forward	1		R	
16	6mm2	m			
	Earth Wire				
17	2.5mm2	m	300.00		
18	4mm2	m			
	SOCKETS OUTLETS				
	Supply, install and connect socket outlets in flush wall mounted boxes, power skirting, trunking or surface if required complete with cover plates and all necessary accessories:				
19	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH	4.00		
20	Supply and install 230V, 16A combination switched socket outlets (with 1 x standard 16A round 3 pin socket + 1 x 3 pin ZA plug socket combined) with weatherproof (IP44) box flush mounted on the wall c/w steel cover plate (white) suitable to accommodate SANS 164-1 & SANS 164-2 socket outlets.	EACH			
21	Supply and install 230V, 16A standard round 3-pin switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-1 socket outlets.	EACH			
22	Supply and install 230V, 16A 3-pin ZA plug switched socket outlets flush mounted on the power skirting c/w steel cover plate (white) suitable to accommodate SANS 164-2 socket outlets.	EACH			
	Carried Forward  Section No. 16  Bill No. 9  GUARDHOUSE- ELECTRICAL INSTALLATION  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

ĺ	Brought Forward			R	
23	Supply and install cluster unit to accommodate: 1 x 16A standard round 3- pin switched socket outlet, 16A 3-pin ZA plug switched socket outlet + 1 x RJ11 telephone outlet and RJ45 data outlet complete with covers, blank plates and all necesssary accessories (to be installed in 1 tier wall box). Rates to include blank covers for RJ11 and RJ45 only as these outlets are measured under ICT.	EACH			
24	Supply and install 5 Amp single un-switched Socket	EACH			
<b>2</b> T	outlet (complete with 60mm pvc round box for light fittings). The socket to be mounted on the trunking or somewhere else in the celing void.	EACH	10.00		
	SWITCHES				
	Supply, install and connect light switches in flush wall mounted boxes, complete with cover plates and all necessary accessories:				
25	Supply and install 16A one lever one way light switch flush mounted on the wall	EACH	2.00		
26	Supply and install 16A two lever one way light switch flush mounted on the wall	EACH			
27	Supply and install 16A one lever two way light switch flush mounted on the wall	EACH			
28	Supply and install Day light switch/photocell	EACH	2.00		
	<u>ISOLATORS</u>				
	Supply, install and connect isolators in flush wall mounted boxes or surface, complete with cover plates and all necessary accessories (Isolators to be mounted within one meter of the equiment to be controlled).				
29	Supply and install 400V, 30A double pole isolator surface mounted on the wall for pump connections. Rates to include 4 inch x 4 inch extension box	EACH	8.00		
30	Supply and install 230V, 60A double pole isolator flush mounted in the wall for stove connection	EACH			
	Carried Forward			R	
	Section No. 16 Bill No. 9 GUARDHOUSE- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
31	Supply and install 230V, 30A double pole isolator mounted in the ceiling void for HVAC .Rates to include 4 inch x 4 inch extension box	EACH			
	LUMINAIRES				
	Supply, install and connect luminaires complete with lamps, fixings, brass screws, washers, etc. All recessed light fittings should be supplied with 3m connection lead				
32	Type A1 (1200mm long surface mounted open channel fluorescent light fitting complete with 2 x 28W T5 Lamps and Electronic control gear.	EACH	3.00		
33	Type C (Ceiling mounted 18W LED round bulkhead IP65 light fitting with 2 x 9W E27 Edison Screw LED Lamps, prismatic acrylic diffuser)	EACH	9.00		
34	Type D (Surface mounted 30W LED flood light fitting)	EACH	2.00		
35	Type A6 (1200 x 600mm recessed fluorescent light fitting complete with 3 x 28W T5 Lamp, double parabolic louvres and electronic control gear )	EACH			
36	Type R (Wall mounted round bulkhead IP65 c/w E27 20W red LED Imap, and electronic control gear and prismatic acrylic diffuser)	EACH			
	TELECOMMUNICATION AND DATA				
37	RJ11 cover plate on the wall or Power skirting	EACH			
38	RJ45 cover plate on wall or Power skirting	EACH			
39	450mm x 300mm x 125mmdeep telephone wall box	EACH			
	TESTING AND COMMISSIONING				
40	Inspections, testing and handing over of the complete installation in the presence of the Engineer and certify the results on the Certificate of compliances by an accredited person.		Item		
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 9 GUARDHOUSE- ELECTRICAL INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	<del></del>

Item No			Quantity	Rate	Amount
	SECTION 17 : ELECTRICAL ENGINEERING				
	BILL NO 10 : EARTHING AND LIGHTNING PROTECTION: ELECTRICAL INSTALLATION				
	LIGHTNING PROTECTION				
1	Install 1,5m SABS Approved earthrods at a depth off 500mm below ground level	EACH	49.00		
2	70mm² Insulated Copper wire	m	245.00		
3	Bond to test point as per drawing.	EACH	49.00		
4	Electrothemical /Exothermic connection	EACH	49.00		
5	Trenching in soft rock	m3	49.00		
6	PVC conduit 25mm diametre (flush mounted in the wall from the roof to the flush galvanised conduit box and from conduit box to the earth peg outside the building)	m	343.00		
7	105mm x 105 mm galvanized conduit box located 300 mm above finished floor level and fitted with blank PVC cover plates labelled "Earth Test Point".	EACH	49.00		
8	Conductive Cement	EACH	49.00		
9	Continuous 35 square mm round solid zinc coated copper strip secured to roof of building, including all clamps, joints and fixing accessories.	m	490.00		
10	10mm2 bare copper earth wire for interconnection of earth pegs	m	686.00		
	Carried Forward to Summary of Section No. 16 Section No. 16 Bill No. 10 EARTHING AND LIGHTNING PROTECTION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

Item No			Quantity	Rate	Amount
	SECTION 17 : ELECTRICAL ENGINEERING	l			
	BILL NO 11 : AREA AND SECURITY LIGHTING: ELECTRICAL INSTALLATION				
	Supply and install area and security lights as indicated in drawings				
1	Pole mounted flood light luminaire with 30W LED lamp mounted on a 8m high pole	EACH	16.00		
2	Supply & install 76 mm top diameter hot dipped galvanised steel mast of mineral grey paint finish with overall length of 5 m for direct embedment in ground and complete with accessories including 2,5 mm² internal wiring, BCEW, pole earthing and access cover. 4 x 30W flood lights to be mounted in one pole as indicated on the drawing	EACH	4.00		
	CABLES, CONDUCTORS & SLEEVES				
3	6mm2 x 3 core PVC/SWA/PVC Alu cable (underground cables for post tops)	EACH	200.00		
	GLANDS AND SHROUDS				
4	6mm2 x 3 core PVC/SWA/PVC Alu cable	EACH	8.00		
	LIGHTING CONTROL				
5	Photocell	EACH	4.00		
6	32 A contactor switch with 240 V AC coil, enclosed in distribution enclosure and coupled to photocell.	EACH	4.00		
	CABLE MARKERS & WARNING TAPES				
7	Cable warning tape	m	400.00		
	SUPPLY & INSTALL UPVC SLEEVES (Rate to include 2,5mm2 draw wire)				
8	50 diameter	m	60.00		
	Section No. 16 Bill No. 11 AREA AND SECURITY LIGHTING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
9	25mm	m	60.00		
	TRENCHING AND EXCAVATIONS (450mm wide & 800mm deep), Rate to include backfilling, compacting and other necessary materials required for aroud the cables				
10	Pickable soil	m3	72.00		
	TESTING AND COMMISSIONING				
11	Testing and commissioning and issuing of COC for the complete lighting installation		Item		
	Carried Forward to Summary of Section No. 16			R	_
	Section No. 16 Bill No. 11 AREA AND SECURITY LIGHTING Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

SECTION 17 : ELECTRICAL ENGINEERING BILL NO 12 : INTERCOM INSTALLATION	,			Ī
BILL NO 12: INTERCOM INSTALLATION				
The complete installation must comply to GDID electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.				
90 Way Intercom Controller Master Station. Must support or drive a minimum of 90 speakers.	m	1.00		
High quality, wall mount, indoor, intercom module complete with Speaker (10W) & microphone. The microphone must be very sensitive, able to clearly pick audio in a class environment when activated with no feedback	EACH	22.00		
Outdoor Intercom module complete with Horn Speaker (5-30W) & microphone. (IP66)	EACH	15.00		
School siren to be located in the admin block. The siren to be activated from three push button located in the strongroom, server room and security room (complete installation of 2 x siren with 3 push buttons and a timer)	m	1.00		
Paging console with Gooseneck microphone	EACH	1.00		
Terminal Box: Lockable, Flush mount with knockouts 300 x 400 x 140mm	EACH	2.00		
Main Termination Block	EACH	1.00		
4 pair, twisted, screened, 22swg cable	EACH	100.00		
10 pair, twisted, screened, 22swg cable	EACH	100.00		
20 pair, twisted, screened, 22swg cable	m	200.00		
25mm PVC conduiting and accessories	m	200.00		
110 sleeves	m	100.00		
Carried Forward Section No. 16 Bill No. 12 INTERCOM INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  90 Way Intercom Controller Master Station. Must support or drive a minimum of 90 speakers.  High quality, wall mount, indoor, intercom module complete with Speaker (10W) & microphone. The microphone must be very sensitive, able to clearly pick audio in a class environment when activated with no feedback  Outdoor Intercom module complete with Horn Speaker (5-30W) & microphone. (IP66)  School siren to be located in the admin block. The siren to be activated from three push button located in the strongroom, server room and security room (complete installation of 2 x siren with 3 push buttons and a timer)  Paging console with Gooseneck microphone  Terminal Box: Lockable, Flush mount with knockouts 300 x 400 x 140mm  Main Termination Block  4 pair, twisted, screened, 22swg cable  20 pair, twisted, screened, 22swg cable  20 pair, twisted, screened, 22swg cable  25mm PVC conduiting and accessories  110 sleeves  Carried Forward  Section No. 16  Bill No. 12  INTERCOM INSTALLATION  Tshedimoso Elemental Estimate Rev02	electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  90 Way Intercom Controller Master Station. Must support or drive a minimum of 90 speakers.  High quality, wall mount, indoor, intercom module complete with Speaker (10W) & microphone. The microphone must be very sensitive, able to clearly pick audio in a class environment when activated with no feedback  Outdoor Intercom module complete with Horn Speaker (5-30W) & microphone. (IP66)  School siren to be located in the admin block. The siren to be activated from three push button located in the strongroom, server room and security room (complete installation of 2 x siren with 3 push buttons and a timer)  Paging console with Gooseneck microphone  EACH  Terminal Box: Lockable, Flush mount with knockouts 300 x 400 x 140mm  EACH  Main Termination Block  4 pair, twisted, screened, 22swg cable  EACH  10 pair, twisted, screened, 22swg cable  EACH  20 pair, twisted, screened, 22swg cable  EACH  25mm PVC conduiting and accessories  m  110 sleeves  m  Carried Forward  Section No. 16  Bill No. 12  INTERCOM INSTALLATION  Tshedimoso Elemental Estimate Rev02	electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  90 Way Intercom Controller Master Station. Must support or drive a minimum of 90 speakers.  High quality, wall mount, indoor, intercom module complete with Speaker (10W) & microphone. The microphone must be very sensitive, able to clearly pick audio in a class environment when activated with no feedback  Catch School siren to be located in the admin block. The siren to be activated from three push button located in the strongroom, server room and security room (complete installation of 2 x siren with 3 push buttons and a timer)  Terminal Box: Lockable, Flush mount with knockouts 300 x 400 x 140mm  EACH 1.00  Main Termination Block EACH 1.00  4 pair, twisted, screened, 22swg cable EACH 100.00  10 pair, twisted, screened, 22swg cable EACH 100.00  20 pair, twisted, screened, 22swg cable EACH 100.00  25mm PVC conduiting and accessories m 200.00  Carried Forward  Section No. 16  Bill No. 12  INTERCOM INSTALLATION  Tshedimoso Elemental Estimate Rev02	electrical installation specifications. Therefore Tenders are advised to study the specifications and drawings before the Bill is to be price.  90 Way Intercom Controller Master Station. Must support or drive a minimum of 90 speakers.  m 1.00  High quality, wall mount, indoor, intercom module complete with Speaker (10W) & microphone. The microphone must be very sensitive, able to clearly pick audio in a class environment when activated with no feedback  Cath 22.00  Outdoor Intercom module complete with Horn Speaker (5-30W) & microphone. (IP66)  School siren to be located in the admin block. The siren to be activated from three push button located in the strongroom, server room and security room (complete installation of 2 x siren with 3 push buttons and a timer)  Paging console with Gooseneck microphone  EACH 1.00  Terminal Box: Lockable, Flush mount with knockouts 300 x 400 x 140mm  EACH 2.00  Main Termination Block  EACH 1.00  4 pair, twisted, screened, 22swg cable  EACH 100.00  20 pair, twisted, screened, 22swg cable  EACH 100.00  25mm PVC conduiting and accessories  m 200.00  10 sleeves  m 100.00  Carried Forward  R  Section No. 16 Bill No. 12 INTERCOM INSTALLATION Tshedimoso Elemental Estimate Rev02

	Brought Forward		R	
	Testing and Commissioning			
13	Testing and Commissioning of Installation	Item		
14	Manuals, Documentation, AS Builts	Item		
15	Training of Personnel	Item		
	Carried Forward to Summary of Section No. 16 Section No. 16		R	<u></u>
	Bill No. 12 INTERCOM INSTALLATION			
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

	SECTION SUMMARY - SECTION 17: ELECTRICAL ENGINEERING	<u>i</u>		
Bill No		Page No		Amount
1	BULK SUPPLY & RETICULATION & ESKOM UPGRADE CONTRIBUTION	259		
2	BLOCK 1 : ADMIN BUILDING- ELECTRICAL INSTALLATION	265		
3	BLOCK 2 : DINNING ROOM & NUTRITION CENTRE- ELECTRICAL INSTALLATION	270		
4	BLOCK 3: MULTI MEDIA CENTRE- ELECTRICAL INSTALLATION	275		
5	BLOCK 4: GRADE R- ELECTRICAL INSTALLATION	280		
6	EXISTING CLASSROOMS BLOCK 1- ELECTRICAL INSTALLATION	285		
7	EXISTING CLASSROOMS BLOCK 2- ELECTRICAL INSTALLATION	290		
8	EXISTING ABLUTIONS- ELECTRICAL INSTALLATION	295		
9	GUARDHOUSE- ELECTRICAL INSTALLATION	300		
10	EARTHING AND LIGHTNING PROTECTION	301		
11	AREA AND SECURITY LIGHTING	303		
12	INTERCOM INSTALLATION	305		
	Carried to Final Summary		R	
	Section No. 16 Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No		Quantity	Rate	Amount
	SECTION 18: MECHANICAL ENGINEERING			
	SECTION 1.1 - COMMISSIONING AND DOCUMENTATION (MECHANICAL INSTALLATIONS)			
1	Preparation of O & M manuals and Commissioning reports	Item		
2	Preparation of shop drawings samples etc.	Item		
3	As Built Drawings In accordance to specification	Item		
4	Testing, Commissioning, Balancing & Handing over	Item		
5	Maintenance of complete installation for 12 months			
	Supervision and Attendance	Item		
6	Engineering, Submissions & Approvals	Item		
7	Compliance with OHS specifications	Item		
8	Additional test required by Engineer	Item		
9	Training of End-user	Item		
	Carried Forward to Summary of Section No. 17		R	
	Section No. 17 Bill No. 1			
	COMISSIONING & DOCUMENTATION  Tshedimoso Elemental Estimate Rev02  Stage 2 Elemental Estimate			
	Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount	
	SECTION 18: MECHANICAL ENGINEERING					
	SECTION 1.2 - BILL 1 - HVAC SYSTEM					
	upply, installation and setting of the following drawings					
	HEAT PUMP MID WALL SPLIT UNIT INVERTER					
	Design, manufacture, works testing, supply and deliver to site, moving into position, erection, connecting up, site testing, witness testing, proving to insurance inspectors, demonstrating to the Employer, commissioning and maintenance of the complete mechanical systems and equipment as shown on the drawings and datasheets.					
	Summary as follows:					
	MIDWALL HEAT PUMP SPLIT UNITS					
	Supply and install inverter type DX heat pump midwall units complete with fittings and fixtures, including insulated supply and return air plenum boxes, as specified and shown on the drawing					
	Admin Block					
1	[AC01]: Nominal Cooling Capacity : 18000Btu	No	1.00			
	Supply and install comlete with all fixtures and appurtinancies for complete installation					
	REFRIGERANT PIPING (R 410)					
	Refrigerant pipes complete with thermal insulation, other fittings and fixtures, brackets, pressure tested and fully charged up with refrigerant in accordance with datasheets and specifications for the above.					
2	15.9mm dia	m	10.00			
3	12.7mm dia	m	10.00			
						_
	Carried Forward  Section No. 17  Bill No. 2  AIR CONDITIONING INSTALLATION  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R		

	Brought Forward			R	
	CABLE RACK				
	Supply and install cable rack for refrigerant piping c/w joints and fixtures and fittings.				
4	200mm wide	m			
5	100mm wide	m	10.00		
6	50mm	m			
	Supply PVC condensate pipes c/w joints and fixtures and fittings				
7	50mm dia	m			
8	25mm dia	m	10.00		
9	20mm dia	m			
	CONTROL UNITS				
10	Supply and install remote control units as specified for all DX split air conditioning units.	No	1.00		
	ELECTRICAL WORK				
11	Supply and install electrical work including power and control cabling and connections as specified for the air conditioning units.		Item		
	TEST & COMMISSION				
12	Test and Commission the Entire Air conditioning system			SUM	
13	Ditto but in the presence of and to the entire satisfaction of the Consulting Engineer.	No	1.00		
	Carried Forward to Summary of Section No. 17 Section No. 17 Bill No. 2 AIR CONDITIONING INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	_

Item No			Quantity	Rate	Amount	
	SECTION 18: MECHANICAL ENGINEERING					
	BILL 2 - FIRE PROTECTION INSTALLATION					
	Design, manufacture, works testing, supply and deliver to site, moving into position, erection, connecting up, site testing, witness testing, proving to insurance inspectors, demonstrating to the Employer, commissioning and maintenance of the complete mechanical systems and equipment as shown on the drawings and datasheets.					
	FIRE HOSE REELS					
1	30m fire hose reel including pro-rata cost for 50mm connecting pipework from the fire reticulation main including 25 diameter drop pipe to hose reel and break ins, fittings, pipework, hanging/fixing materials, finished paintwork, pressure gauge, etc., as per detail on tender drawings.	<b>1</b> 0	5.00			
	<u>PIPEWORK</u>					
	Supply and install medium grade, seamless galvanized mild steel pipework c/w pipe supports and accessories as specified and shown on the drawings					
2	80mm dia	m	185.00			
3	65mm dia	m	120.00			
4	50mm dia	m	220.00			
5	32mm dia	m	90.00			
6	25mm dia	m	70.00			
	SITE RETICULATION AND HYDRANTS					
7	Supply and Install 110mm HDPE pipe c/w pipe supports and accessories as specified as per site drawing	m	450.00			
	Comind Former					_
	Section No. 17 Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R		

	Brought Forwa	ard		R	
8	Supply and Install 110 mm non-return valve	No	2.00		
9	Excavation of Trench and back filling with imported material	m	450.00		
	Extra Over for Fittings				
10	110mm bend	No	50.00		
11	110mm Tee	No	50.00		
12	65mm bend	No	30.00		
13	65mm Tee	No	30.00		
	Tees and reducing tees				
	GALVANISED				
14	100 x 100 x 100mm	No	8.00		
15	100 x 80 x 100mm	No	8.00		
16	100 x 65 x 100mm	No	6.00		
17	80 x 80 x 80mm	No	2.00		
18	80 x 65 x 80mm	No	8.00		
19	65 x 65 x 65mm	No	8.00		
20	65 x 32 x 65mm	No	4.00		
21	65 x 25 x 65mm	No	12.00		
22	32 x 32 x 32mm	No	15.00		
23	32 x 25 x 32mm	No	10.00		
24	25 x 25 x 25mm	No	12.00		
	Carried Forward Section No. 17 Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate	ard		R	

HDPE				
400 400 400				
100 x 100 x 100mm	No	8.00		
100 x 80 x 100mm	No	8.00		
100 x 65 x 100mm	No	6.00		
PORTABLE FIRE EXTINQUISHERS				
5 kg DCP fire extinguishers complete with backboard mounted as required	No	1.00		
4,5 kg DCP fire extinguishers complete with backboard mounted as required	No	18.00		
5kg kg carbon dioxide extinguishers in weather proo polycarbonate cabinet complete with backboard mounted as required	No	5.00		
FIRE Extinguishers FIRE CABINETS				
Supply and install weather proof steel cabinets for fire extinguishers	No	10.00		
Carried Forward Section No. 17 Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	PORTABLE FIRE EXTINQUISHERS  5 kg DCP fire extinguishers complete with backboard mounted as required  4,5 kg DCP fire extinguishers complete with backboard mounted as required  5kg kg carbon dioxide extinguishers in weather proo polycarbonate cabinet complete with backboard mounted as required  FIRE Extinguishers FIRE CABINETS  Supply and install weather proof steel cabinets for fire extinguishers  Carried Forward  Section No. 17  Bill No. 3  FIRE PROTECTION INSTALLATION  Tshedimoso Elemental Estimate Rev02	PORTABLE FIRE EXTINQUISHERS  5 kg DCP fire extinguishers complete with backboard mounted as required  4,5 kg DCP fire extinguishers complete with backboard mounted as required  No  5kg kg carbon dioxide extinguishers in weather proo polycarbonate cabinet complete with backboard mounted as required  No  FIRE Extinguishers FIRE CABINETS  Supply and install weather proof steel cabinets for fire extinguishers  No  Carried Forward  Section No. 17  Bill No. 3  FIRE PROTECTION INSTALLATION  Tshedimoso Elemental Estimate Rev02	PORTABLE FIRE EXTINQUISHERS  5 kg DCP fire extinguishers complete with backboard mounted as required  No  1.00  4,5 kg DCP fire extinguishers complete with backboard mounted as required  No  18.00  5kg kg carbon dioxide extinguishers in weather proo polycarbonate cabinet complete with backboard mounted as required  No  FIRE Extinguishers FIRE CABINETS  Supply and install weather proof steel cabinets for fire extinguishers  No  10.00  Carried Forward  Section No. 17  Bill No. 3  FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02	PORTABLE FIRE EXTINQUISHERS  5 kg DCP fire extinguishers complete with backboard mounted as required  4.5 kg DCP fire extinguishers complete with backboard mounted as required  No  18.00  5kg kg carbon dioxide extinguishers in weather proo polycarbonate cabinet complete with backboard mounted as required  No  FIRE Extinguishers FIRE CABINETS  Supply and install weather proof steel cabinets for fire extinguishers  No  10.00  Carried Forward  R  Section No. 17  Bill No. 3  FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02

	Brought Forward			R	
	STATUTORY FIRE SIGNAGE				
	Supply and install photo luminescent fire and evacuation signage as described below and as per the tender drawings:				
	All signed to be framed in the natural anodized aluminium frame with mitred corner and concealed elbow joints.				
	All wall mounted fire and evacuation signs to be fixed with concealed screws and no double sided tape will be permitted for the mounting of the signs.				
	All suspended fire and evacuation signs to be hung from a steel cables or metal chains.				
	All signage to be a minimum 190mm size.				
	All fire and evacuation signs to be SANS 1186-1, 1186-3 and 1186-5 approved, and also to bear the SANS stamp of approval.				
32	E1/E2	No	10.00		
33	E2	No	10.00		
34	E3	No	8.00		
35	F15	No	10.00		
36	F45	No	8.00		
37	F4	No	8.00		
38	F5/F6	No	8.00		
	HYDRANTS, VALVES ETC.				
39	100mm cast iron tamper proof hydrant valve	No	9.00		
40	"Chubb" 03451 pair of gunmetal instantaneous steamer connections fitted with caps and short lengths of chain, including U-tube and pressure gauge	No	9.00		
	Carried Forward			R	
	Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
	Section No. 17 Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02			R	

	Brought Forward			R	
41	100mm Tamper proof "Double - Booster" hydrant valve	No	2.00		
42	Provide 1200m x 80mm galvanised piping riser	No	9.00		
43	Provide hydrants with 15MPA concrete anchors	No	9.00		
	FIRE PUMP AND TANK				
44	2.0l/s @ 450kPa Electrically Driven Primary Fire Pumps, one primary & one standy including a Jockey pump and all necessary suction / delivery pipe-work, valves, hanging material, control equipment, etc.		Item		
45	5.5l/s @ 450kPa Electrically Driven Primary Domestic water Pumps, one primary & one standy including all necessary suction / delivery pipe-work, valves, hanging material, control equipment, etc.		Item		Rate only
46	65mm Tank in-fill pipe-work from borehole including all necessary valves, boosters etc.	m	110.00		
47	40m³ Hot dip galvanised Pannel tank complete with flanges, ball valves, as per tender drawings. The tank should be so fitted with level controllers that allows for separation of the domestic water and the fire fire water using levels strategy. The tank should have a access opening to allow for servicing		Item		
48	Pump Motor control for a complete automatic operation of the system			SUM	
49	Electrical cabling between auto start arrangement, float level indicators, in- ball valves and pump room control panel, etc.			SUM	
50	300 L Expansion Pressure tank		Item		
	Carried Forward			D	
	Section No. 17 Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward	: l		R
	Pipping inbetween water tank and Pumps			
	Supply deliver and instal HDPE pipping complete with fittings and ancillatires for a complete operating system with associated pipe-work fittings and materials in and around pump and tanks, in-fill pipe in-ball valves level indicators auto start arrangement etc. for completion of pump room.follows			
51	ø 80mm	m	5.00	
52	ø 65mm	m	5.00	
53	ø 50mm	m	10.00	
	<u>EIBows</u>			
54	ø 80mm		Item	
55	ø 65mm		Item	
56	ø 50mm		Item	
	<u>Tees</u>			
57	ø 80mm		Item	
58	ø 65mm		Item	
59	ø 50mm		Item	
	<u>Valves</u>			
	Gate valve			
60	ø 80mm		Item	
61	ø 65mm		Item	
62	ø 50mm		Item	
	Carried Forward Section No. 17 Bill No. 3 FIRE PROTECTION INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate	i		R

	Brought Forward		R		
	None Return Valve				
63	ø 80mm	Item			
64	ø 65mm	Item			
65	ø 50mm	Item			
	<u>Strainers</u>				
66	ø 80mm	Item			
67	ø 65mm	Item			
68	ø 50mm	Item			
	<u>Gauges</u>				
69	100mm Dial Pressure Gauge	Item			
70	0-600Kpa range	Item			
71	Pressure switches	Item			
	Carried Forward to Summary of Section No. 17 Section No. 17		R		
	Bill No. 3 FIRE PROTECTION INSTALLATION				
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
	<b>.</b>				
		ı l	ļ	<u> </u>	ı

Item No			Quantity	Rate	Amount	
	SECTION 18: MECHANICAL ENGINEERING					
	BILL 4 - LP GAS INSTALLATION					
	* "Rate" includes material. delivery & installation labour.					
	Nutrition Centre/Dinning Hall					
	The supply, delivery, installation and commissioning of equipment as per the requirements of SANS 10087-1 for LPG gas installation					
	Nutrition Centre/Dinning Hall					
	Schedule 40 black steel piping complete with fittings, brackets and welded joints.					
1	15mm dia nominal bore	m	15.00			
2	22mm dia nominal bore	m	10.00			
3	25mm dia nominal bore	m	30.00			
	LPG Gas Quality Isolating Valve					
4	10mm dia nominal bore	No	1.00			
5	25mm dia nominal bore	No	7.00			
6	Low Pressure regulator	No	1.00			
	LPG Gas Quality Flexible Hose Connector					
7	10mm dia nominal bore	No	1.00			
8	25mm dia nominal bore	No	6.00			
	<u>Trunking</u>					
9	100 x 50 Epoxy powder coated trunking.	m	30.00			
						_
	Carried Forward			R		
	Section No. 17 Bill No. 4					
	LPG INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

	Brought Forward			R	
	Supply and Install 2x2 48kg LPG right and left Cylinders, Manifold and Ancillary Equipment as per Tender Drawing:				
10	2x2 Cylider Manifold		Item		
11	Supply 48kg Cylinders		Item		
	<u>Fittings</u>				
	Reducers				
12	25 -15 mm dia nominal bore	No	10.00		
13	15 -10 mm dia nominal bore	No	3.00		
	<u>Bends</u>				
14	25 mm dia nominal bore	No	10.00		
15	15 mm dia nominal bore	No	5.00		
	<u>Tees</u>				
16	25mm dia nominal bore	No	5.00		
	Valve Box				
	Isolating valve box including valves, instrumentation, identification labelling, etc				
17	Valve Cabinets with one Diameter 25mm Isolating valve.	No	1		
	PRESSURE REGULATOR				
	FIRST STAGE PRESSURE REGULATOR				
	Supply, deliver, off-load, store on site and install First Stage				
	Pressure regulator for a maximum gas				
18	demand of 750 000kJ/hr	No	1.00		
	Carried Forward			R	
	Section No. 17 Bill No. 4				
	LPG INSTALLATION Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate  Stage 3 - Elemental Estimate				

	Brought Forward		R	
19	1800x800mm Steel Diamond Steel mesh hot dip galvanised locable cage/enclosure with roof, pad lock, no-unauthorised personnel, no-smoking sign, no celphone sign	ltem		
20	Colour coding	Item		
	Carried Forward to Summary of Section No. 17		R	_
	Section No. 17 Bill No. 4 LPG INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			

Item No			Quantity	Rate	Amount
1	SECTION 18: MECHANICAL ENGINEERING	•			
	SECTION 1.5 - BILL 1 - COLD ROOM SYSTEM				
	* "Rate" includes material. delivery & installation labour.				
1	570L Chest Freezer	No	3.00		
2	570 L Fridge	No	2.00		
	Galvanised shelves				
3	3 tier		Item		
4	2 tier		Item		
	Carried Forward to Summary of Section No. 17			R	
	Section No. 17 Bill No. 5				
	REFRIGERATION INSTALLATION  Tshedimoso Elemental Estimate Rev02				
	Stage 3 - Elemental Estimate				

Item No		Quantity	Rate	Amount	
	SECTION 18: MECHANICAL ENGINEERING				
	SECTION 1.1 - BILL NO. 5B: KITCHEN EQUIPMENT (MECHANICAL INSTALLATIONS)				
	Supply, install and commission the following Kitchen Equipment as per the Technical specification				
	* "Rate" includes material. delivery & installation labour.				
	Nutrition Centre				
1	3 Burner gas stove 118,000 kj/hr, Floor Standing.	2.00			
2	25L Hot water Urn No.	2.00			
					_
	Carried Forward to Summary of Section No. 17 Section No. 17		R		_
	Bill No. 6 KITCHEN & LAB INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 18: MECHANICAL ENGINEERING				
	SECTION 1.7 - BILL NO. 7: KITCHEN EQUIPMENT KITCHEN CANOPY (MECHANICAL INSTALLATIONS)				
	Supply, install and commission the following Equipment as per the Technical specification				
	* "Rate" includes material. delivery & installation labour.				
	Kitchen Canopy				
	Inline duct mounted fan installed complete with matching sound attenuators on either side of the fan.				
1	47: Diameter 710 Fan delivering 1980 l/s against 150 pa @ 1440rpm.	No	2.00		
	Uninsulated galvanised steel sheet metal supply air ducting complete with support brackets.				
	450mm Diameter Ducting				
2	Duct	m	10.00		
3	Duct with 45 degree cut-outt and Vremin-proof Wiremesh	No	1.00		
4	Canvass flexible	No	2.00		
5	Bend	No	6.00		
	500mm Diameter Ducting				
6	Duct	m	5.00		
7	Duct with 45 degree cut-outt and Vremin-proof Wiremesh	No	1.00		
8	Canvass flexible	No	2.00		
	Carried Forward  Section No. 17  Bill No. 7  EXTRACTION CANOPY INSTALLATION  Tshedimoso Elemental Estimate Rev02			R	
	Stage 3 - Elemental Estimate				

Stainless steel Extraction Canopy with support brackets,	No	3.00		
<u>Filters, Fire Dampers, Drip trays etc.As follows: Refer to detail drawings/ working drawings</u>				
Nutrition Kitchen/Hall				
3100x750 Canopy of 09mm 430 stainless steel with a no 4 satin finish. Canopy to have 4 x 495l/s inertia filters. Fan capacity as follows: 1980l/s@ 150Pa	No	1.00		
CONTROLLER FOR KITCHEN CANOPY				
Supply and install a stop start controller for Kitchen Canopy as specified.				
Nutrition Center/Hall	No	1.00		
Carried Forward to Summary of Section No. 17 Section No. 17 Bill No. 7 EXTRACTION CANOPY INSTALLATION Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	
	CONTROLLER FOR KITCHEN CANOPY  Supply and install a stop start controller for Kitchen Canopy as specified.  Nutrition Center/Hall  Carried Forward to Summary of Section No. 17  Section No. 17  Bill No. 7  EXTRACTION CANOPY INSTALLATION  Tshedimoso Elemental Estimate Rev02	Carried Forward to Summary of Section No. 17  Section No. 17  Bill No. 7  EXTRACTION CANOPY INSTALLATION  Tshedimoso Elemental Estimate Rev02	Carried Forward to Summary of Section No. 17  Section No. 17 Bill No. 7  EXTRACTION CANOPY INSTALLATION  Tshedimoso Elemental Estimate Rev02	Carried Forward to Summary of Section No. 17  Section No. 17 Bill No. 7  EXTRACTION CANOPY INSTALLATION Tshedimoso Elemental Estimate Rev02

Item No			Quantity	Rate	Amount
	SECTION 18: MECHANICAL ENGINEERING				
	SECTION 1.8 - BILL NO. 8: HOT WATER GENERATION & DISTRIBUTION (MECHANICAL INSTALLATIONS)				
	The supply, delivery, installation and commsioning of equipment as shall be detailed in this schedule. Tenderers are referred to The Technical specification for the Domestic Hot and Cold Water Installation.				
	COPPER PIPE				
	Class 0 copper water piping in accordance with SANS 460 installed complete with short lengths, cutting, plain couplings, capillary solder and jointing strictly in accordance with the Manufacturer's instructions, support bracksts etc.				
	Pipe lengths:				
	(Including hangers, brackets, welding, mountings, flanges, gaskets, connecters, bolts, nuts, washers, anchors, joining connecters, etc.)				
1	dia 15	m	105.00		
2	dia 22	m	135.00		
3	dia 28	m	20.00		
	Bends:				
	(Including hangers, brackets, welding, mountings, flanges, gaskets, etc.)				
4	dia 15	m	75.00		
5	dia 22	m	75.00		
6	dia 28	m	20.00		
	Carried Forward  Section No. 17  Bill No. 8  WET SERVICES INSTALLATION HOT WATER  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	]
	Tees:				
	Extra over copper piping for capillary fittings in accordance with SANS - 2 complete with hangers, brackets, soldering , etc.				
7	dia 15-15-15	m	55.00		
8	dia 22-22-22	m	55.00		
9	dia 28-28-28	m	7.00		
	Reducers				
	Extra over copper piping for capillary fittings in accordance with SANS - 2 complete with hangers, brackets, soldering , etc.				
10	dia 22 - 15	No	35.00		
11	dia 28 - 22	No	35.00		
	Isolating valves:				
	Ball type Isolating Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions and complying to SANS 1056 - 3				
12	dia 15	No	33.00		
13	dia 22	No	24.00		
14	dia 28	No	6.00		
	Non return valves:				
	Lift type Non Return Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.				
15	dia 22	No	4.00		
					_
	Carried Forward			R	
	Section No. 17 Bill No. 8 WET SERVICES INSTALLATION HOT WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				
					l

	Brought Forward		Í	R		
	Pressure Relief Valves:					
	Specified Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.					
16	dia 22	No	4.00			
	Air Relief Valves:					
	Specified Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.					
17	dia 22	No	5.00			
	Vacuum Breaker:					
	Specified Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.					
18	dia 22	No	4.00			
	Strainers:					
	Specified Strainer complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.					
19	dia 22	No	4.00			
20	dia 28	No	1.00			
21	dia 32	No	1.00			
	Pipe Mounted Measuring Port					
22	Specified pipe mounted temperature measuring port complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.	No	3.00			
	Carried Forward			R		
	Section No. 17 Bill No. 8 WET SERVICES INSTALLATION HOT WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate					

	Brought Forward			R	ĺ
	Pipe Insulation				
	25 mm thick snap-on preformed glass fibre insulation a density of 80 kg/m3 covered with cloth wrapp.				
23	dia 15	m	25.00		
24	dia 25	m	30.00		
25	dia 22	m	15.00		
26	dia 28	m	15.00		
	Pipe Insulation (Exposed piping)				
	25 mm thick snap-on preformed glass fibre insulation with a density of 80 kg/m3 and covered with 0.5mm thick galvanised sheet metal cladding.				
27	dia 25	m	16.00		
28	dia 22	m	16.00		
29	dia 28	m	15.00		
	Insulation to fittings (plastered finish) including T's, bends, reducers, valves, etc.				
30	dia 22	No	28.00		
31	dia 28	No	8.00		
	Pipe hangers:				
	Complete with angle irons, hangers, rods, chains/rods, brackets, anchors/fasteners, welding, mountings, flanges, gaskets, bolts, nuts, washers, etc.				
	Pipe hangers:(Ceiling or Truss Mounted)				
32	dia 108 to 15 Two Pipe Support.	No	13.00		
33	dia 108 to 15 Single Pipe Support.	No	13.00		
	Carried Forward Section No. 17			R	
	Bill No. 8 WET SERVICES INSTALLATION HOT WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	Brought Forward			R	
	Solar Geyser With Electric Back up rated 3Kw				
34	150 Liter	No	1.00		
35	200 Liter	No	2.00		
36	Adjustable inclined roof Mounting Bracket set at 36 degree to te horizontal and facing North	No	3.00		
	Carried Forward to Summary of Section No. 17 Section No. 17			R	
	Section No. 17 Bill No. 8 WET SERVICES INSTALLATION HOT WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

Item No			Quantity	Rate	Amount
	SECTION 18: MECHANICAL ENGINEERING				
	SECTION 1.1 - BILL NO 1,9: COLD WATER RETICULATION (MECHANICAL INSTALLATIONS)				
	The supply, delivery, installation and commsioning of equipment as shall be detailed in this schedule. Tenderers are referred to The Technical specification for the Domestic Hot and Cold Water.				
	PE-Xa: Cross-linked Polyethylene Piping				
	Cross-linked Polyethylene Water Piping in accordance with DIN 16892 with thermal memory effect. Piping shall be installed complete with short lengths, cutting, plain couplings and jointing strictly in accordance with the Manufacturer's instructions, support brackests etc.				
	Pipe lengths:				
	(Including hangers, brackets, jointing, joining connecters, etc. Piping to be exruded complete with colour coding as per Gauteng DID Specifications)				
1	dia 15	No	230		
2	dia 22	No	80		
3	dia 28	No	80		
4	dia 35	No	40		
5	dia 42	No	20		
6	dia 54	No	85		
	Bends:				
	(Including hangers, brackets, welding, mountings, flanges, gaskets, etc.)				
7	dia 15	No	350		
	Carried Forward			R	
	Section No. 17 Bill No. 9 WET SERVICES INSTALLATION COLD WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			, ,	

	Brought Forward			R	
8	dia 22	No	140		
9	dia 28	No	110		
10	dia 35	No	50		
11	dia 42	No	45		
12	dia 54	No	90		
	<u>Tees:</u>				
13	dia 15	No	350		
14	dia 22	No	140		
15	dia 28	No	110		
16	dia 35	No	50		
	Reducers				
	(Including hangers, brackets, jointing, joining connecters, etc. Piping to be exruded complete with colour coding as per Gauteng DID Specifications)				
17	dia 15	No	160		
18	dia 22	No	110		
19	dia 28	No	100		
20	dia 35	No	90		
21	dia 42	No	90		
22	dia 54	No	55		
	Isolating valves:				
	Ball type Isolating Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions and complying to SANS 1056 - 3				
	Carried Forward  Section No. 17  Bill No. 9  WET SERVICES INSTALLATION COLD WATER  Tshedimoso Elemental Estimate Rev02  Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
23	dia 12	No	45		
24	dia 15	No	120		
25	dia 22	No	80		
26	dia 28	No	10		
27	dia 35	No	10		
28	dia 42	No	10		
29	dia 54	No	10		
30	dia 76	No	10		
	Non return valves:				
	Lift type Non Return Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.				
31	dia 15	No	1		
32	dia 22	No	10		
33	dia 28	No	10		
34	dia 35	No	10		
35	dia 42	No	10		
36	dia 54	No	10		
37	dia 76	No	10		
	Balancing Valves:				
	Specified Balancing Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturer's instructions.				
38	dia 22	No	5		
	Carried Forward Section No. 17 Bill No. 9 WET SERVICES INSTALLATION COLD WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			R	

	Brought Forward			R	
	Flexible Connection:				
	(Including hangers, brackets, jointing, joining connecters, etc. Piping to be exruded complete with colour coding as per Gauteng DID Specifications)				
39	Flexible braided connection 15mm dia [300mm long]	No	92		
	Pipe Insulation (Exposed piping)				
	25 mm thick snap-on preformed glass fibre insulation with a density of 80 kg/m3 and covered with 0.5mm thick galvanised sheet metal cladding.				
40	dia 15	m	20		
41	dia 22	m	20.00		
42	dia 28	m	20.00		
43	dia 35	m	20.00		
	Pipe Insulation (Exposed piping)				
	25 mm thick snap-on preformed glass fibre insulation with a density of 80 kg/m3 and covered with 0.5mm thick galvanised sheet metal cladding.				
44	dia 22	m	72.00		
45	dia 28	m	40.00		
46	dia 35	m	20.00		
	Pipe hangers:				
47	dia 42 to 15 Single Pipe Support (Wall Mounted).	No	95		
	Cable tray for pipe including installation, complete with 41mm galvanised uni-strut type channel and 10mm galvanised threaded rods.				
48	300x100	m	305.00		
	Carried Forward			R	
	Section No. 17 Bill No. 9 WET SERVICES INSTALLATION COLD WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate			•	

	Brought Forwa	rd		R	
49	150x100	m	45		
	Connection to site water reticulation				
	Isolation Valves: Gate type valve				
50	dia 15	No	20.00		
51	dia 22	No	15.00		
52	dia 28	No	36.00		
53	dia 35	m	30.00		
	Non return valves:				
54	dia 22	No	10.00		
55	dia 28	No	21.00		
56	dia 35	m	15.00		
	Pressure Reducing Valve				
57	dia 22	No	5.00		
58	dia 28	No			Rate Only
59	dia 35	m			Rate Only
60	dia 42	m			Rate Only
61	dia 54	m			Rate Only
62	dia 65	No	2.00		
63	Borehole submissible pumps	No	1.00		
	Carried Forward to Summary of Section No. 7 Section No. 17 Bill No. 9 WET SERVICES INSTALLATION COLD WATER Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate	17		R	

	SECTION SUMMARY - SECTION 18: MECHANICAL ENGINEERIN	<u>G</u>			
Bill No		Page No		Amount	
1	COMISSIONING & DOCUMENTATION	307			
2	AIR CONDITIONING INSTALLATION	309			
3	FIRE PROTECTION INSTALLATION	316			
4	LPG INSTALLATION	319			
5	REFRIGERATION INSTALLATION	320			
6	KITCHEN & LAB INSTALLATION	321			
7	EXTRACTION CANOPY INSTALLATION	323			
8	WET SERVICES INSTALLATION HOT WATER	328			
9	WET SERVICES INSTALLATION COLD WATER	333			
	Carried to Final Summary		R		_
	Section No. 17				_
	Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate				

	FINAL SUMMARY			
Section No		Page No		Amount
1	SECTION 1: PRELIMINARY & GENERAL	3		
2	SECTION 2: BLOCK 1 ADMIN	36		
3	SECTION 3 : BLOCK 2 DINING AND NUTRITION CENTRE	67		
4	SECTION 4 : BLOCK 3 MEDIA CENTRE	98		
5	SECTION 5: BLOCK 4 GRADE R CLASSROOM	129		
6	SECTION 6 : EXISTING ABLUTIONS ALTERATIONS	155		
7	SECTION 7 : ALTERATIONS TO EXISTING CLASSROOMS	168		
8	SECTION 8 : SECURITY GUARD HOUSE	197		
9	SECTION 9 : PUMP ROOM	218		
10	SECTION 10 : COVERED WALKWAYS	230		
11	SECTION 12 : EXTERNAL WORKS	234		
12	SECTION 13 : DECANTING & DEMOLISHING	235		
13	SECTION 14 : ELEVATED TANK BASES	240		
14	SECTION 15 : CIVIL ENGINEERING (WATER & SANITATION)	249		
15	SECTION 16: CIVIL ENGINEERING (ROADS & STORMWATER)	257		
16	SECTION 17: ELECTRICAL ENGINEERING	306		
17	SECTION 18: MECHANICAL ENGINEERING	334		
	Carried to Form of Tender Tshedimoso Elemental Estimate Rev02 Stage 3 - Elemental Estimate		R	