ITEM NO			QUANTITY	RATE	AMOUNT
	SECTION NO. 1 - PRELIMINARIES AND GENERAL				
	BILL NO. 1				
	PRELIMINARIES				
	PREAMBLES FOR TRADES				
	Site establishment	Fixed	1		
	Allowance for preliminaries and general for items related to time, value and fixed	TIME	14		
	Subbies	Fixed	1		
	SECTION NO. 2 - BUILDING WORK				
	BILL NO. 1				
	EARTHWORKS				
	EXCAVATIONS				
	Excavate in earth as defined not exceeding 2m deep below reduced or natural ground level and set aside for use as filling (backfilling elsewhere) for:				
36,923	Strip Footings	m^3	504		
	Bases	m^3	60		
	Extra over trench and hole excavations in earth for excavation in:				
37,288	"Soft Rock" - Allowance	m^3	28		
	Extra over all excavations for carting away or to be used as backfilling				
37,653	Surplus material from excavations for backfilling or carting away to dumping site.	m^3	564		
	Risk of collapse of excavations				
38,018	Sides of trench and hole excavations not exceeding 1,5m deep.	m^2	1,187		
	Keeping excavations free of water.				
38,384	Keeping excavations free of water.	No	1		
	FILLING, ETC.				

	Earth filling G6 supplied by the contractor compacted to 95% Mod AASHTO density		
38,749	Under floors	m^3	310
	Compaction of Surfaces		
39,114	Compaction of ground surface under floors including ripping and scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m^2	1,032
	TESTS		
	Prescribed tests to determine degree of compaction or other properties of ground or filling		
39,479	Mod AASHTO Density test	No	10
	Earthworks contingencies	Prov	1

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

	REINFORCED CONCRETE		
	Class 15MPa/19mm concrete		
	Blinding	m^3	19
	Class 25MPa/19mm concrete		
36,924	Cavity fill	m^3	26
37,289	Surface beds cast in panels on waterproofing	m^3	129
37,654	Strip Footings	m^3	101
	Bases	m^3	40
	Walls	m^3	15
	Class 30MPa/19mm concrete		
38,019	Isolated Beams	m^3	66
38,385	Slabs including beams and inverted beams	m^3	361
	Columns	m^3	10
	TEST BLOCKS		
38,750	Making and testing 150 x 150 x 150mm concrete strength test cube	No	50
	CONCRETE SUNDRIES		

	Finishing top surfaces of concrete smooth with a wood float and brush finish		
39,115	Surface beds, slabs and roof areas	m^2	2,571
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)		
	Smooth formwork to sides		
	Columns	m^2	109
	Beams	m^2	437
	Walls	m^2	98
39,480	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	404
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)		
	Smooth formwork to soffits		
39,846	Slabs not exceeding 250mm thick propped up exceeding 1,5m not exceeding 3,5m high	m^2	1,539
	Smooth formwork to soffits		
40,211	Soffits of Beams propped up exceeding 1,5 and not exceeding 3,5m high	m^2	110
	STAIRCASES PROVISIONAL		
	Complete staircase including form work, concrete and reinforcement (Finish to staircase elsewhere)		
40,941	Stairs	No	2
	MOVEMENT JOINTS ETC		
	Two layers of 375 micron DPC membrane as slip joint between horizontal concrete and brick surfaces including cement mortar bed		
41,307	Not exceeding 300mm wide	m	395
	Expansion joints with 'Jointex' or similar and approved between vertical concrete and brick surfaces including sealing		
41,672	10mm Joints not exceeding 300mm high or wide	m	777
	Saw cut joints		
42,037	3 x 30mm Saw cut joints sealed with Sika Loadflex, in top of concrete	m	701
	REINFORCEMENT		
	High tensile steel reinforcement to structural concrete work		
42,402	To raft inc beams	t	60.97

	Fabric reinforcement		
43,133	Type 245 fabric reinforcement in surface beds, slabs, etc.	m^2	1,032
	Concrete contingencies	Prov	1

BILL NO. 3

MASONRY

	FOUNDATIONS		
	220mm One brick walls	m^2	127
36,925	280mm Walls of two half brick skins	m^2	352
	SUPERSTRUCTURE		
	Brickwork of clay NFX bricks (14 MPa nominal compressive strength) in class II mortar		
38,020	110mm Half brick walls	m^2	261
38,386	220mm One brick walls	m^2	501
38,751	280mm Hollow walls of two half brick skins including wire ties	m^2	1,402
	BRICKWORK SUNDRIES		
39,116	Splayed mortar fillet one course high in 50mm cavity	m	301
39,481	Closing 50mm cavity of hollow wall horizontally and vertically with one course of brickwork	m	267
	Brickwork reinforcement		
39,847	75mm Wide reinforcement built in horizontally	m	17,654
40,212	150mm Wide reinforcement built in horizontally	m	3,021
	Standard prestressed fabricated lintels		
40,577	110 x 75mm Lintels in lengths not exceeding 3m	m	129
40,942	150 x 75mm Lintels in lengths not exceeding 3m	m	118
	Galvanized hoop iron cramps, ties, etc		
41,308	30 x 1,6mm Wall tie 500mm long with one end fixed to timber frame and other end built into brickwork	No	671
	Masonry contingencies	Prov	1

BILL NO. 4

WATERPROOFING

	DAMP PROOFING OF WALLS AND FLOORS		
	One layer of 375 micron "SABS approved" embossed damp proof course		
36,926	DPC in window cills	m	118
37,291	In walls	m^2	185
	One layer of 250 micron "SABS approved" waterproof sheeting sealed at laps		
37,656	Under surface beds	m^2	1,187
	Two coats 'Cemflex' waterproofing slurry mixed with Portland cement and water		
38,021	On plastered shower walls and floors	m^2	185
	WATERPROOFING TO ROOFS ALLOWANCE	PROV	1

BILL NO. 10

STRUCTURAL STEELWORK

PREAMBLES

For preambles refer to "Model Preambles for Trades"

SUPPLEMENTARY PREAMBLES

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.

All Structural Steelwork shall be fabricated and erected in accordance with SANA 1200H

All Structural Steelwork shall be manufactured subject to a set of approved Shop Drawings that will be submitted to the project Engineer for reviewing, commenting and approval

All Structural Steelwork shall be of Grade 300W steel except cold formed hollow sections which shall be commercial grade

All Structural Steelwork, unless described as Galvanised, shall be factory primed with two coats self etching primer

All Structural bolts shall be grade 8.8

STEEL COLUMNS AND BEAMS PROVISIONAL

Galvanised welded columns in single lengths with flat section base, top, bearer and connection plates bolted to concrete

36,932	100 x 100 x 4.5mm 12.9kg/m SHS columns	t	0.89

Galvanised welded beams in single lengths with flat section bearer and connection plates bolted to concrete

37,297	254 x 146mm x 31,3kg/m I-beam	t	1.38

BILL NO. 12

PLASTERING

PREAMBLES

For preambles refer to "Model Preambles for Trades"

SCREEDS

Screeds on concrete

36,934	Average 35mm thick on shower floors to falls and currents to outlets	m^2	40
37,299	25mm Thick on floors	m^2	1,381
	Average 60mm Thick to roofs to falls	m^2	1,162

INTERNAL PLASTER

One coat cement plaster on brickwork

37,664	On narrow widths	m^2	175
38,029	On walls	m^2	2,925

One coat cement plaster on concrete

38,395	On concrete soffits of slabs	m^2	
38,760	On concrete soffits and sides of beams	m^2	

EXTERNAL PLASTER

One coat cement plaster on brickwork

39,125	On narrow widths	m^2	105
39,490	On walls	m^2	1,402

SECTION NO. 3 - EXTERNAL WORK

GENERAL SITE WORKS

BILL NO. 1

PREAMBLES

For preambles refer to "Model Preambles for Trades"

SUPPLEMENTARY PREAMBLES

Nature of ground

The nature of the ground is assumed to be a pickable material, therefore "earth", but possibly interspersed with "soft rock" builders not exceeding 0,3m3 in volume

NOTE : All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the contractor's method of operation. Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking.

Compaction tests on filling

The rates of filling shall be deemed to include all compaction tests necessary for the contractor to aquint himself of the compaction, etc. The contractor must carry out sufficient tests in accordance with SABS 1200 DA-1988 page 10 in order to satisfy himself about the consistancy and compaction of materials Seperate tests measured are for the engineers sole use to establish the compaction and Mod AASHTO by an independant laboratory should it be necessary

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.

SITE ALTERATIONS AND DEMOLITIONS, ETC.

36,951	Provisional allowance for site alterations and demolitions to accommodate new build	Prov	1