

## THE ROAD TRANSPORT AND SAFETY AGENCY

# NON-COSTED ESTIMATES FOR:

- 1. CONSTRUCTION OF EXAMINATION SLABS (NDOLA AND KITWE)
- 2. CONSTRUCTION OF EXAMINATION SHELTER FOR SILVEREST
- 3. CONSTRUCTION OF BOUNDARY WALL FOR MIMOSA IMPOUND YARD
- 4. PAVING OF MIMOSA IMPOUND YARD

### MIMOSA IMPOUND YARD BOUNDARY WALL PROJECT

RTSA
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Item		<u>Qty</u>	Rate	Amount
<u>No</u>				
	SUBSTRUCTURE EXCAVATIONS/EARTHWORKS.			
	EXCAVATIONS			
a	Keeping Excavations free from Water. Allow for keeping the excavations free from storm, surface water and mud by pumping and baling.	Item		
b	Pumping subterranean water using pump of not exceeding 300 litres per hour capacity from a depth of not exceeding 1 metre.	Item		
	<u></u>			
С	Excavate to remove top soil and load, wheel and deposit where directed on site, average depth 150mm. 411m (perimeter of boundary wall) x 1m (width) m <sup>2</sup>	411		
d	Imported Filling to make up levels Laterite compacted to 95% MOD AASHTO 150 mm	100		
	m	132		
	Excavation including maintaining and supporting sides and keeping excavations free from water, mud and fallen materials. Excavate trench for foundations trenches commencing at formation level.			
е	not exceeding 0.6 metres deep.			
	m <sup>3</sup>	132		
	<u>Extra on all excavations.</u>			
f	Extra over excavation in pickable material for excavation in hard pickable material or soft rock. 	F		
	111	ر		
	carried forward		ZMW	

### MIMOSA IMPOUND YARD BOUNDARY WALL PROJECT

	brought forward		ZMW	
g	Ditto for excavation in hard rock. $m^3$	5		
h	Disposal. Redig from spoil heap, return, fill and compact selected excavated material around foundations, to 95% MOD AASHTO. m <sup>3</sup>	66		
i	Redig from spoil heap and remove off-site. $m^3$	66		
j	Imported Backfilling. Laterite compacted to 95% MOD AASHTO m <sup>3</sup>	66		
k	Anti-termite treatment. Chemical anti- termite treatment executed by an approved specialist to sides and bottoms of excavations m <sup>2</sup>	698.7		
l	<u>Vibrated reinforced concrete class 25</u> Foundation Footing m <sup>3</sup>	36		
m	Hollow concrete blockwork filled solid with mortar 1:4 mix in cement mortar Two Courses Solid filled blockwork walling in foundations, overall thickness 150mm m <sup>2</sup>	192		
	<u>26 Gauge mild steel "Brickforce" reinforcement laid horizontally in mortar joint</u>			
п	To walling, thickness 150 mm	399		
	carried forward		ZMW	

	brought forward		ZMW	
	FOUNDATION FOOTING REINFORCEMENT Steel mesh fabric reinforcement to B.S. 4483			
0	Layer of mesh fabric reinforcement laid on top and bottom in slab or bed with 150mm side and end laps (measured nett-no allowance made for laps) . Conforce 257	219.45		
	<u>CONCRETE TESTING</u>			
p	Allow for carrying out compressive strength tests on concrete cubes as described. Submit test results from UNZA School of Engineering Laboratory and/or any other recognized materials testing facility.	Ttem		
		TCEIII		
	SUBSTRUCTURE to section summary		ZMW	

<u>Item</u>		<u>Qty</u>	Rate	<u>Amount</u>
<u>No.</u>	SUPERSTRUCTURE WALLING			
а	Concrete blocks to Engineers details and specifications. Walling height 2.6m from NGL, thickness. 150 mm m <sup>2</sup>	1037.4		
b	26 Gauge mild steel "Brickforce" reinforcement laid horizontally in mortar joint. To walling, thickness. 150 mm m	1597		
	SUPERSTRUCTURE WALLING to section			
	summary		ZMW	

Item		<u>Qty</u>	Rate	Amount
<u>No</u>				
	SLIDING GATE INSTALLATION			
	Supply & installation of two sliding			
	gates 6m long to detail as described			
	75 x 75mm square tubes & 2mm flat			
	sheets. Provide for roller wheels,			
	roller rail, and associated locking			
	mechanisms as described. Also include			
	<u>800mm wide pedestrian access gate</u>			
	complete with barell locking			
	<u>mechanism.</u>			
a	6 m	0		
	number	Z		
	SLIDING GATE INSTALLATION TO SECTION		77 MTAT	
	Sammar y		214144	

Item		<u>Qty</u>	<u>Rate</u>	Amount
<u>No.</u>				
	CONCRETE ACCESS RAMP			
	Provide for installation of reinforced			
	concrete access ramp 6m wide x 8m long			
	<u>x 200mm thickness to detail as</u> described in drawings. Ramp to join			
	with main access road into Mimosa			
	Drive Circuit			
а	Concrete Access Ramp			
	m³			
7-				
d	Conforce 257	4.0		
	m	48		
С	110mm diameter concrete drainage pipes			
_	m	12		
d	provide for shuttering & strutting			
	item			
	CONCRETE ACCESS RAMP INSTALLATION to		7 MM	
	Section Samuary		215100	

	SUMMARY	
DESCRIPTION	PAGE	ZMW
SUBSTRUCTURE EXCAVATIONS/EARTHWORKS.		
SUPERSTRUCTURE WALLING		
SLIDING GATE INSTALLATION		
CONCRETE ACCESS RAMP		
BOUNDARY WALL TOTAL	ZMW	
CONTINGENCIES		
MOBILISATION & DEMOBILISATION		
ADD 16% VAT		
TOTAL TO CONTRACTOR'S BID FORM		
SIGNATURE OF CONTRACTOR		
NAME OF FIRM & ADDRESS		
DATE		

Item		<u>Qty</u>	Rate	Amount
<u>No</u>				
	SUBSTRUCTURE EXCAVATIONS/EARTHWORKS.			
	EXCAVATIONS			
	Keeping Excavations free from Water.			
	Allow for keeping the excavations free			
а	pumping and baling.	Item		
	Pumping subterranean water using pump of not exceeding 300 litres per hour			
	capacity from a depth of not exceeding			
b	1 metre.	Item		
	Site Clearance			
	<u>Site citarance</u>			
	Excavate to remove top soil and load			
	wheel and deposit where directed on			
	site, to formation level. 50m (length)			
С	x 40m (WIGTH)	2000		
	111	2000		
	Excavation including maintaining and			
	supporting sides and keeping			
	excavations free from water, mud and			
	tallen materials. Excavate slab area			
	(length) x 30m (width) x 0.2m (depth)			
d	not exceeding 0.3 metres deep.			
	m	240		
	<u>Extra on all excavations.</u>			
	Extra over excavation in pickable			
f	material for excavation in hard			
L	$m^{3}$	1		
		-		
g	Ditto for excavation in hard rock.			
	m <sup>3</sup>	1		
	Disposal. Redig from spoil heap, return, fill and compact selected			
	excavated material around foundations,			
h	to 98% MOD AASHTO.			
	m <sup>3</sup>	60		
	carried forward		7.MW	

	brought forward		ZMW	
i	Redig from spoil heap and remove off-site all unused material. $m^3$			
j	Imported Backfilling. Laterite compacted to 98% MOD AASHTO. Mechanically compact backfill to post compaction layer of 150mm. m <sup>3</sup>	240		
k	Anti-termite treatment. Chemical anti- termite treatment executed by an approved specialist to sides and bottoms of excavations. Treat 30m x 40m excavation for slab area.	1228		
	SUBSTRUCTURE to section summary		ZMW	
<u>Item</u> No.		<u>Qty</u>	<u>Rate</u>	Amount
	<u>CONCRETE SLAB - 25 Mpa</u>			
a	Install 500 micron Polythene. Lay polythene sheeting to well compacted slab area after treatment with anti termite.			
	m <sup>2</sup>	1200		
b	<u>Provide for formwork (planking and strutting timber)</u>			

а	termite.	1200		
b	<u>Provide for formwork (planking and strutting timber)</u>			
	Item	192		
	<u>SLAB REINFORCEMENT</u> <u>Steel mesh fabric reinforcement to</u> <u>B.S. 4483</u>			
	Layer of mesh reinforcement laid on top and bottom in slab or bed with 150mm side and end laps in edge beam (measured nett-no allowance made for laps)			
С	Conforce 257, not less than 5mm gauge ${\it m}^2$	1800		
	carried forward		ZMW	

	brought forward		ZMW	
d	Vibrated reinforced concrete class 25 (25 Mpa). Provide for 25mm chamfers on all four sides. Include edge beam dimensioned as per drawing & reinforced accprdingly with conforce 257.	123.6		
	item			
d	CONCRETE TESTING Allow for carrying out compressive strength tests on concrete cubes as described. Submit test results from UNZA School of Engineering Laboratory and/or any other recognized materials testing facility. Provide concrete test results to the RTSA Project Manager	Item		
	CONCRETE SLAB to section summary		ZMW	

	SUMMARY	
DESCRIPTION	PAGE	ZMW
SUBSTRUCTURE EXCAVATIONS/EARTHWORKS		
CONCRETE SLAB - 25 Mpa		
CONCRETE SLAB TOTAL	ZMW	
CONTINGENCIES		
MOBILISATION & DEMOBILISATION		
ADD 16% VAT		
TOTAL TO CONTRACTOR'S BID FORM		
SIGNATURE OF CONTRACTOR		
NAME OF FIRM & ADDRESS		
DATE		

#### MIMOSA IMPOUND YARD PAVING PROJECT

Item		<u>Qty</u>	<u>Rate</u>	Amount
<u>No</u>				
	EXCAVATIONS & EARTHWORKS			
	EXCAVATIONS			
	Keeping Excavations free from Water.			
	Allow for keeping the excavations free			
	from storm, surface water and mud by			
а	pumping and baling.	Item		
	Pumping subterranean water using pump			
	of not exceeding 300 litres per hour			
	capacity from a depth of not exceeding			
b	1 metre.	Item		
	<u>Site Clearance</u>			
	Excavate to remove top soil and load,			
	wheel and deposit where directed on			
	depth 150mm Meghapigally compact			
C	cleared site to 98% MOD ANSHTO			
C	created site to 50% MOD AAShito	11000		
	m	11978		
	Imported Backfilling. Laterite			
	compacted to 98% MOD AASHTO.			
	Mechanically compact backfill to post			
	compaction layer of 150mm. Imported			
d	Laterite to cover area of 11978m $^2$ .			
	m <sup>3</sup>			
	Extra on all excavations.			
	Terture error erroration in mishable			
	Extra over excavation in pickable			
۵	nickable material or soft rock			
C		F		
	111	5		
-				
£	Ditto for excavation in hard rock.			
	m <sup>3</sup>	5		
	Disposal. Redig from spoil heap,			
	return, fill and compact selected			
	excavated material around foundations,			
g	to 98% MOD AASHTO.			
	m <sup>3</sup>	599		
	carried forward		ZMW	

	brought forward		ZMW	
h	Redig from spoil heap and remove off-site all remaining unused material. $m^3$			
i	Anti-termite treatment. Chemical anti- termite treatment executed by an approved specialist to compacted laterite area. m <sup>2</sup>	11978		
	EARTHWORKS to section summary		ZMW	

<u>Item</u>		<u>Qty</u>	<u>Rate</u>	Amount
<u>NO.</u>	INSTALLATION OF CONCRETE PAVERS			
а	Install 25Mpa interlocking concrete paving bricks on compacted sand bedding of 50mm. Height of the bricks should not be less than 80mm. m <sup>2</sup>	11978		
b	Concrete edging. Install perimeter & other edges of paved area to have concrete filling in order to ensure pavers are locked in place.			
	Item			
	CONCRETE PAVERS to section summary		ZMW	

	SUMMARY	
DESCRIPTION	PAGE	ZMW
SUBSTRUCTURE EXCAVATIONS/EARTHWORKS		
CONCRETE SLAB PAVERS		
CONCRETE SLAB TOTAL	ZMW	
CONTINGENCIES		
MOBILISATION & DEMOBILISATION		
ADD 16% VAT		
TOTAL TO CONTRACTOR'S BID FORM		
SIGNATURE OF CONTRACTOR		
NAME OF FIRM & ADDRESS		
DATE		

Item		Qty	Rate	Amount
No				
	SUBSTRUCTURE EXCAVATIONS/EARTHWORKS & FOUNDATIONS.			
	EXCAVATIONS			
а	<u>Keeping Excavations free from Water.</u> <u>Allow for keeping the excavations</u> <u>free from storm, surface water and</u> <u>mud by pumping and baling.</u>	Item		
b	Pumping subterranean water using pump of not exceeding 300 litres per hour capacity from a depth of not exceeding 1 metre.	Item		
	Site Preparation			
	Provide for breaking through existing slab, excavate 1.2m x 1.2m x 1m (depth), remove rubble & soil and load, wheel and deposit where directed on site.			
	Imported Filling to make up levels			
С	Laterite compacted to 95% MOD AASHTO			
	m <sup>3</sup>	31		
	Excavation including maintaining and supporting sides and keeping excavations free from water, mud and fallen materials. Excavate trench for foundations trenches commencing at formation level.			
d	not exceeding 1.2 metres deep. $m^3$	31		
	<u>Extra on all excavations.</u>			
е	Extra over excavation in pickable material for excavation in hard pickable material or soft rock. m <sup>3</sup>	2		
	carried forward		ZMW	

	brought forward		ZMW	
f	Ditto for excavation in hard rock. $m^3$	3		
g	Disposal. Redig from spoil heap, return, fill and compact selected excavated material around foundations, to 95% MOD AASHTO. m <sup>3</sup>	8		
h	Redig from spoil heap and remove off-site. $m^3$	23		
i	Imported Backfilling. Laterite compacted to 95% MOD AASHTO m <sup>3</sup>	31		
j	Anti-termite treatment. Chemical anti- termite treatment executed by an approved specialist to sides and bottoms of excavations m <sup>2</sup>	77.76		
	Vibrated reinforced concrete class 25. Ensure adequate vibration by use of a poker vibrator.			
k	Stub Column Foundations m <sup>3</sup>	9		
l	Safety Pillar extensions to stub columns m <sup>3</sup>	3		
	<u>STUB COLUMN REINFORCEMENT</u>			
т	Top and bottom rebar for bases. Y12 deformed bars bent as per drawing details <i>m</i>	1008		
n	Stub column rebar. Y12 deformed bars bent as per drawing details. m	173		
0	Stirrups. R8 round bars bent as per drawing details m	226.8		
	carried forward		ZMW	

	carried forward		ZMW	
n	Anchor bolts 1m length 16mm diameter			
Р	nicitor boreb. In religen, round drameter	70		
	number	12		
	16mm steel plates for top & bottom			
q	fixing of anchor bolts			
	number	36		
	SAFETY COLUMN EXTENSIONS			
	REINFORCEMENT			
	Stub column rebar. Y12 deformed bars			
r	bent as per drawing details.			
	m	72		
	Stirrups. R8 round bars bent as per			
S	drawing details			
	m	108		
	CONCORTE TECTINC			
	CONCRETE TESTING			
	Allow for corruing out comprogrius			
	strength tests on concrete cubes as			
	described Submit test results from			
	INZA School of Engineering Laboratory			
	and/or any other recognized materials			
t	testing facility			
C		Ttom		
		TCCIII		
	SUBSTRUCTURE to section summary		ZMW	

<u>Item</u>		<u>Qty</u>	Rate	_Amount_
<u>Nо.</u> а	<b>SUPERSTRUCTURE</b> Provide for finishing of safety columns with black & yellow reflective pain, 150mm diagonal chevrons. 3 coats.			
	m <sup>2</sup> Construction of steel examination shelter using 203x203x25 main steel universal beams, 100x50mm lipped channels, 50x50mm equal angles and IBR/IT4 roofing sheets & all connections - steel plates, welding,	3.25		
b	203 x 203 x 25 UB_13m Number	30		
	carried forward		ZMW	

	brought forward		ZMW	-
С	150 x 50mm Lip channels 13m			
	m	90		
d	50 x 50mm equal angles			
		90		
	IDD /ITTA Doofing abouts 0 Emm			
0	complete with fixing screws			
C	m <sup>2</sup>	600		
	111	000		
£	1. from Dullar the TDD (TEM) O From			
L	Im front Bullnosing, IBR/114, 0.5mm			
	m	60		
	200 x 200mm (depth) Galvanized steel			
	gutter installation complete with			
g	fastening brackets			
	m	20		
	Installation of 150mm galvanized steel			
	drainage pipes on either side of			
h	gutter complete with end shoes			
	m	9		
	Provide for fabrication of 4 No.			
	angles & hardwood timber finished with			
	2 coats varnish & black gloss paint			
i	for the framework.			
	item			
	Provide for painting of entire steel			
	sheller structure. Prime with rea			
÷	banana vellow 2 coats			
2	item			
	I Cem			
	Provide for installation of 5 No. x			
	150W LED lights fixed to steel roofing			
	framework in each bay at the rear end			
	of shelter overlooking into the			
	shelter complete with switch &			
Ŀ	capiing, connected to main circuit at guard house			
17	guara nouse.			
	i Lein			
	SUFERSIRUCIURE INSTALLATION TO SECTION		7 ML	_
	Builder y		211104	-

	SUMMARY	
DESCRIPTION	PAGE	ZMW
SUBSTRUCTURE EXCAVS/EARTHWORKS/FDTNS.		
SUPERSTRUCTURE		
BOUNDARY WALL TOTAL	ZMW	
CONTINGENCIES		
MOBILISATION & DEMOBILISATION		
ADD 16% VAT		
TOTAL TO CONTRACTOR'S BID FORM		
SIGNATURE OF CONTRACTOR		
NAME OF FIRM & ADDRESS		
DATE		

#### MAIN SUMMARY

			<u>No. of</u>		
SECTION	DESCRIPTION	<u>Unit cost</u>	<u>Units</u>	Amount	
LOT 1	BOUNDARY WALL		_ 1_		
LOT 2	EXAMINATION SLAB		2_		
LOT 3	CONCRETE PAVING		_ 1_		
LOT 4	EXAMINATION SHELTER	2	1		
	Sub-Total		. <u> </u>		
CONTINGENCIES					
			_		
			_		
TOTAL AMOUNT	(NET OF VA	AT)	_		
<u>Add:</u> Vat @ 16%			_		
TOTAL AMOUNT CARRIED TO FORM OF TENDER					
Name of Contractor	:				
	-				
Address	: -				
	-				
	-				
Signature	: -				
Date	: -				