

INDEX TO BILL OF QUANTITIES

SECTION 1 **PRELIMINARY AND GENERAL**

PART AA	PRELIMINARIES
PART AB	GENERAL SPECIFICATIONS
PART AH	OCCUPATIONAL HEALTH and SAFETY

SECTION 2 **ROADWORKS & FOOTPATHS**

PART B	SITE CLEARANCE
PART C	CONCRETE WORK
PART DA	EARTHWORKS : BULK
PART EF	KERBS AND HAUNCHES
PART EG	SIDEWALKS, FOOTPATHS and MEDIAN AREAS
PART F	PROTECTION WORKS
PART TA	ROAD SIGNS
PART TB	ROAD MARKINGS

SECTION 3 **STORMWATER DRAINAGE**

PART B	SITE CLEARANCE
PART C	CONCRETE WORK
PART DB	EARTHWORKS FOR PIPE TRENCHES
PART F	PROTECTION WORKS

SECTION 4 **SEWER RETICULATION**

PART PH	MANHOLES and APPURTENANT DRAINAGE WORKS
---------	---

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

BILL OF QUANTITIES

SECTION 1 PRELIMINARY AND GENERAL

PART AA PRELIMINARIES

Item	Clause	Description	Unit	Quantity	Rate	Amount
		<u>GENERAL CONDITIONS OF CONTRACT (GCC2015) READ IN CONJUNCTION WITH CONTRACT DATA</u>				
1	GCC 2015	Fixed Charge obligations	sum	1		
2	GCC 2015	Time Related obligations	sum	1		
		<u>SANS 1921-1: GENERAL ENGINEERING AND CONSTRUCTION WORKS READ IN CONJUNCTION WITH THE ASSOCIATED SPECIFICATION DATA IN THE SCOPE OF WORKS</u>				
3	SANS 1921-1	Fixed Charge Items	sum	1		
4	SANS 1921-1	Time Related Items	sum	1		
5	C1.2.3.1	COMMUNITY LIAISON OFFICER	PC Sum	60000	1.00	60 000.00
6		Allow for CLO to be appointed	%	60000		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

R

PART AB GENERAL SPECIFICATIONS

Item	Clause	Description	Unit	Quantity	Rate	Amount
		<u>FIXED CHARGES</u>				
1	PS.AB.2	Offices for Engineer and Staff	sum	1		
2	PS.14	Contractor's Camp Site / Store Yard	sum	1		
3	AB.5	Notice Board as per Annexure C3.6.1	no.	1		
4	PS.15.3	Deductions for re-tests requested when density of a layer is not as per specification as determined by Acceptance Testing (minus R1000 per set)	set	0	-R1000.00	_____
5	PS.AB.7	Initial Supply of all signs, barricades and delineators	sum	1		
6	PS.13.1	Survey for, and Preparation of, 'As-Built' Drawings	sum	1		
7	PS.13.3	Additional Site Survey	PC Sum	5000	1.00	5 000.00
8	PS.13.3	Contractor's markup on item 7	%	5000		
		<u>TIME RELATED CHARGES</u>				
9	PS.AB.2	Offices for Engineer and Staff	sum	1		
10	PS.14	Contractors Camp Site/Store Yard	sum	1		

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

Part Continued **PART AB GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
11	AB.6	Cost of Samples and Contractor's Preliminary and Site and Site Control Testing	sum	1		
12	AB.7	Maintenance of Pedestrian and Traffic Facilities	sum	1		
13	AB.7	Maintenance of all signs, barricades and delineators	sum	1		
14	PS.13.2	Setting out of works	sum	1		
15	PS.11	Site Security	sum	1		
16	C1.2.3.6/PS.A B.8	Expected Risks: De-establishment costs	sum	1		
17	C1.2.3.6/PS.A B.8	Expected Risks: Re-establishment costs	sum	1		
18	PS.19.1	Penalties for not removing unwanted material by end of work day	day	0	-R1000.00	_____

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

R

PART AH OCCUPATIONAL HEALTH and SAFETY

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	AH.14.1/ PS.10	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	sum	1		
2	AH.14.2/ PS.10	Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	sum	1		
3	AH.14.3/ PS.10	Submission of the Health and Safety File	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

R

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

SECTION 2 ROADWORKS & FOOTPATHS

PART B SITE CLEARANCE

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	B.8.2	General clearance and grubbing including trees up to a maximum girth of 1.5m	m2	575		
2	B.8.4	Removal of trees of girth exceeding 1,5 m	no.	2		
3	PS.B.8.5	Removal of 1,2 m - 2,4 m high wire mesh fence, stockpile and reinstate. Rate to include all haulage and stockpile handling	m	30		
4	B.8.9	Removal of brickwork	m3	5		
5	PS.B.8.13	Removal of reinforced/unreinforced concrete	m3	10		
6	B.8.13	Removal of existing asphalt roadway to tip	m3	3		
7	PS.B.8.24	Removal of informal retaining structures	m2	50		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

PART C CONCRETE WORK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	C.8.1	Grade 20MPa/19mm concrete for Footpaths (Class 3 - Wood Float Surface Finish)	m3	10		
2	C.8.1	Grade 20MPa/19mm concrete for Handrail Post Bases and Bollard Bases	m3	0.5		
3	C.8.1	Grade 30MPa/28mm concrete for 3m wide Access Roads	m3	60		
4	C.8.2	Welded fabric reinforcement - Ref Mesh 193	t	0.2		
5	C.8.2	Welded fabric reinforcement - Ref Mesh 311	t	1.3		
6	C.8.3	Class 1 Formwork for concrete works	m2	65		
7	PS.C.8.4	Movement Joints for footpaths as per Standard Detail Drawing 74584 (Sheet 1 of 3)	m	8		
8	PS.C.8.5	Saw cut joints for footpaths as per Standard Detail Drawing 74584 (Sheet 1 of 3)	m	50		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

PART DA EARTHWORKS : BULK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.2	Remove topsoil to stockpile and if surplus to requirements, spoil in an approved dump site. Rate to include for stockpile handling.	m3	55		
2	DA.8.3	Excavate in all material, deposit and spread material as fill or stockpile or,if surplus to requirements, spoil in an approved dump site. Rate to include for stockpile handling.	m3	300		
3	DA.8.3	Excavate soft material to spoil	m3	60		
4	DA.8.3	Extra over on item 3 for excavation in intermediate material	m3	60		
5	DA.8.3	Extra over on item 3 for excavation in hard material	m3	45		
6	DA.8.4	Import G5 Material from commercial sources	m3	85		
7	DA.8.4	Import G7 material from commercial sources	m3	20		
8	DA.8.5	Compact imported G5 material to 95% Mod. AASHTO.	m3	85		
9	DA.8.5	Compact imported G7 material to 93% Mod. AASHTO.	m3	20		
10	PS.DA.8.11	Rip and re-compact insitu material to 90% Mod AASHTO	m3	115		
11	DA.8.6	Trimming of embankments	m2	195		
12	DA.8.9	Formation	m2	485		
13	DA.8.9	Extra over item 12 above for areas of cut or where the fill layer thickness is less than 150mm	m2	12		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

PART EF KERBS AND HAUNCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EF.8.1	Fig.12 kerb	m	70		
2	EF.8.1	Extra over item 1 for curves of radius less than 25 m	m	8		
3	EF.8.1	Mountable kerb and cast insitu channel as per Standard Drawing 74584 (Sheet 2 of 3)	m	265		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

PART EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.EG.8.7	Precast Concrete Steps (Base steps or similar approved) including Grade 20/13 base as per Standard Details Drawing No. 74584 (Sheet 1 of 3)	no.	20		
2	PS.EG.8.8	Handrails as per Standard Detail Drawing No. 74584 (Sheet 1 of 3)	m	8		
3	PS.EG.8.9	Precast Handrail Posts as per Standard Detail Drawing No. 74584 (Sheet 1 of 3)	no.	5		
4	PS.EG.8.10	Precast Concrete Bollards as per Standard Detail Drawing No. 74584 (Sheet 1 of 3)	no.	2		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

PART F PROTECTION WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	F.8.1	Topsoiling on banks, verges and service lines from stockpile - thickness 100mm	m2	100		
2	PS.F.8.3	Grass planting on banks, verges and service lines. Rate to include for supply and lay of Cynodon 'Dactylon' grass, fertilizer and maintenance etc.	m2	100		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

PART TA ROAD SIGNS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	TA.8.1	Supply and erect road sign boards, area not exceeding 2m2 including galvanising	m2	3		
2	TA.8.2	Supply and erect standard 76mm diameter hot dipped galvanised road name sign supports	no.	3		
3	TA.8.3	Excavate and backfill for road sign supports	m3	1		
4	TA.8.4	Concrete grade 20MPa/19mm for road sign footings	m3	1		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

PART TB ROAD MARKINGS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	TB.8.1.1	Road marking paint as per SANS 731 150mm wide (white), including setting out and premarking	km	0.2		

TOTAL CARRIED TO SECTION 2 SUMMARY: ROADWORKS FOOTPATHS

R

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

SECTION 3 STORMWATER DRAINAGE

PART B SITE CLEARANCE

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	B.8.3	General clearance and grubbing for pipelines within a servitude for a width of 2m	m2	10		

TOTAL CARRIED TO SECTION 3 SUMMARY: STORMWATER DRAINAGE

R

PART C CONCRETE WORK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	C.8.1	Grade 25MPa/19mm concrete for 600mm wide x 100mm thick 'trapezodial' drain.	m3	0.7		
2	C.8.2	Welded fabric reinforcement Ref : Mesh 193	t	0.1		
3	C.8.3	Class 1 Formwork for concrete drain	m2	0.5		

TOTAL CARRIED TO SECTION 3 SUMMARY: STORMWATER DRAINAGE

R

PART DB EARTHWORKS FOR PIPE TRENCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.19	Prove existing services by hand excavation (provisional), where depth is: Over 0,0m and not exceeding 1,5m	m3	5		

TOTAL CARRIED TO SECTION 3 SUMMARY: STORMWATER DRAINAGE

R

PART F PROTECTION WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	F.8.1	Topsoiling fom stockpile as directed by the Engineer - thickness 100mm	m2	10		
2	PS.F.8.3	Grass planting as directed by the Engineer. Rate to include for supply and lay of Cynodon 'Dactylon' grass, fertilizers, pesticides etc	m2	10		
3	F.8.6	Reno Mattresses: 300mm thick	m3	1		

TOTAL CARRIED TO SECTION 3 SUMMARY: STORMWATER DRAINAGE

R

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

SECTION 4 SEWER RETICULATION

PART PH MANHOLES and APPURTENANT DRAINAGE WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.PH.8.7	Lowering of existing manholes to suit footpath profile	no.	3		
2	PS.PH.8.7	Extra over item 1 for precast concrete heavy duty manhole cover and frame as per Standard Detail Drawing 38570 and dispose of existing covers and frames	no.	3		

TOTAL CARRIED TO SECTION 4 SUMMARY: SEWER RETICULATION

R

BILL OF QUANTITIES SECTION SUMMARY

SECTION 1 PRELIMINARY AND GENERAL

PART AA	PRELIMINARIES	
PART AB	GENERAL SPECIFICATIONS	
PART AH	OCCUPATIONAL HEALTH and SAFETY	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY

SECTION 2 ROADWORKS & FOOTPATHS

PART B	SITE CLEARANCE	
PART C	CONCRETE WORK	
PART DA	EARTHWORKS : BULK	
PART EF	KERBS AND HAUNCHES	
PART EG	SIDEWALKS, FOOTPATHS and MEDIAN AREAS	
PART F	PROTECTION WORKS	
PART TA	ROAD SIGNS	
PART TB	ROAD MARKINGS	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY

SECTION 3 STORMWATER DRAINAGE

PART B	SITE CLEARANCE	
PART C	CONCRETE WORK	
PART DB	EARTHWORKS FOR PIPE TRENCHES	
PART F	PROTECTION WORKS	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY

SECTION 4 SEWER RETICULATION

PART	PH	MANHOLES and APPURTENANT DRAINAGE WORKS	
TOTAL CARRIED TO FINAL SUMMARY			

Provision of Incremental Services to Informal Settlements within the Southern Region: Road, Footpaths and Associated Stormwater Control in Settlement eMlaza UX-2 (Tropica) (Ward 86)

SUMMARY OF BILL OF QUANTITIES

1	PRELIMINARY AND GENERAL		R _____
	AA PRELIMINARIES	R _____	
	AB GENERAL SPECIFICATIONS	R _____	
	AH OCCUPATIONAL HEALTH and SAFETY	R _____	
2	ROADWORKS & FOOTPATHS		R _____
	B SITE CLEARANCE	R _____	
	C CONCRETE WORK	R _____	
	DA EARTHWORKS : BULK	R _____	
	EF KERBS AND HAUNCHES	R _____	
	EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS	R _____	
	F PROTECTION WORKS	R _____	
	TA ROAD SIGNS	R _____	
	TB ROAD MARKINGS	R _____	
3	STORMWATER DRAINAGE		R _____
	B SITE CLEARANCE	R _____	
	C CONCRETE WORK	R _____	
	DB EARTHWORKS FOR PIPE TRENCHES	R _____	
	F PROTECTION WORKS	R _____	
4	SEWER RETICULATION		R _____
	PH MANHOLES and APPURTENANT DRAINAGE WORKS	R _____	
<hr/>			
	SUB TOTAL		R _____
	ADD VAT (15%) - (only if a registered VAT Vendor)		R _____
	TOTAL CARRIED TO FORM OF TENDER		R _____
<hr/>			