

BILL OF QUANTITIES**SECTION 1 PRELIMINARY AND GENERAL****PART AA PRELIMINARIES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
		<u>GENERAL CONDITIONS OF CONTRACT (GCC 2015) READ IN CONJUNCTION WITH THE CONTRACT DATA</u>				
1	GCC 2015	Contractor fixed obligations	sum	1		
2	GCC 2015	Time Related obligations	months	4		
		<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	months	4		
		<u>COMMUNITY LIAISON OFFICER</u>				
5	PS.13	Allow for a Community Liaison Officer to be appointed	PC Sum	50000	1.00	50 000.00
		<u>LOCAL LABOUR</u>				
6	PS.13	Allow for the weekly submission of proof of employment of local labour	sum	1		
7	PS.13.3	Stakeholder Management and Liaison	months	4		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

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PART AB GENERAL SPECIFICATIONS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	AB.4 PS.AB.2 PS.AB.1.2	Contractor's Camp Site / Store Yard	sum	1		
2	AB.5 PS.AB.4	Notice Board	sum	1		
3	AB.6 PS.DA.13 PS.C.25 PS.14	Cost of Samples and Contractor's Preliminary and Site Control Testing	sum	1		
4	AB.7 PS.15	Initial supply of all signs, barricades and delineators	sum	1		
5	AB.7 PS.15	Maintenance of all signs, barricades and delineators	sum	1		
6	PS.16	Survey and Setting Out	sum	1		
7	PS.11	Provision of security on site to guard against any disruption of the works through out the duration of the contract	sum	1		
8	AB.7	Maintenance of Pedestrian and Traffic Facilities	sum	1		

Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

BILL OF QUANTITIESPart Continued **PART** AB GENERAL SPECIFICATIONS

Item	Clause	Description	Unit	Quantity	Rate	Amount
9	AB.7	Proving of underground services	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

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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.	months	4		
3	AH.14.3 PS.10	Submission of the Health and Safety File.	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

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Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 2 SITE CLEARANCE**PART B SITE CLEARANCE**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	B.8.2	General clearance and grubbing in road reserve	m2	790		
2	B.8.15	Removal of asphalt on roadways to tip	m3	180		
3	B.8.7 PS.TA.1	Removal of street/traffic signs and posts (including breaking of concrete foundation) to store on site for re-use	no.	4		
4	B.8.4 PS.B.8.4	Removal of trees of girth exceeding 1,5 m	no.	3		
5	B.8.19 PS.B.8.19	Removal of disused pipes, 300 - 600 mm diameter and spoil at tip. Rate to include all haulage	m	50		
6	PS.B.2	Cleaning, clearing and flushing of existing manholes	no.	2		
7	PS.B.5	Jetting of stormwater pipes 450 - 600 mm in diameter	m	60		
8	PS.B.8.5	Removal of 1.5 m high wire mesh fence with posts and store on site for re-use	m	10		

TOTAL CARRIED TO SECTION 2 SUMMARY: SITE CLEARANCE

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SECTION 3 CONCRETE WORK
PART C CONCRETE WORK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	C.8.1	Grade 30/26 concrete	m3	30		

TOTAL CARRIED TO SECTION 3 SUMMARY: CONCRETE WORK R

Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 4 BULK EARTHWORKS**PART DA EARTHWORKS : BULK**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.2 PS.DA.8.2	Excavate soft material to stockpile	m3	36		
2	DA.8.3 PS.DA.8.3.1	Excavate unsuitable material below embankments or formation and stockpile	m3	15		
3	DA.8.4 PS.DA.8.4	Import suitable fill material from contractor's off-site source inclusive of haulage and royalties	m3	234		
4	DA.8.5 PS.DA.8.5	Compact imported fill material to 95% Mod. A.A.S.H.T.O.	m3	234		
5	DA.8.5	Compact soft material to 95% Mod. A.A.S.H.T.O.	m3	117		
6	DA.8.9 PS.DA.8.9	Formation	m2	450		

TOTAL CARRIED TO SECTION 4 SUMMARY: BULK EARTHWORKS

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PART DB EARTHWORKS FOR PIPE TRENCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.5 PS.DB.8.6 PS.DB.7	Excavate and backfill in all material for where depth is :- - Over 0,0 m and not exceeding 1,5 m	m3	40		
2	DB.8.5 PS.DB.2 DB.3.4	Provision of selected backfill material for pipe trenches from contractor's offsite source.	m3	60		
3	PS.PG.3	Provision of 19 mm stone material for pipe bedding from commercial or off-site source	m3	70		
4	PS.PG.4 PS.DB.11	Provision of drainage Grade 2A geofabric blanket or similar approved for subsoil pipe	m2	85		
5	PS.P6.5 PG.DB.3.6	Provision of clean coarse sand for pipe bedding from commercial or off-site source	m3	60		
6	PS.PG.4 PG.DB.3.6 PS.DB.1	Placing and compacting of Class B bedding for pipe bedding.	m	50		
7	DB.8.19	Prove existing services by hand excavation, where depth is: - - Over 0,0 m and not exceeding 1,5 m	m3	45		

TOTAL CARRIED TO SECTION 4 SUMMARY: BULK EARTHWORKS

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PART DD EARTHWORKS FOR STRUCTURES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DD.8.2	Excavate in all material for headwalls to spoil	m3	10		

Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

Part Continued PART DD EARTHWORKS FOR STRUCTURES

Item	Clause	Description	Unit	Quantity	Rate	Amount
2	DD.8.3 PS.DB.10	Backfill and compact using material imported from borrow pit	m3	12		

TOTAL CARRIED TO SECTION 4 SUMMARY: BULK EARTHWORKS R

Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 5 GRADED CRUSHED STONE**PART EB GRADED CRUSHED STONE**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EB.8.1 PS.EB.8.1.1	Supply and lay graded crushed stone, 125 mm G4 material and compact to 98% Mod AASHTO	m3	80		
2	EB.8.1 PS.EB.8.1.2	Supply and lay graded crushed stone, 125 mm G6 material and compact to 93% Mod AASHTO	m3	80		
3	EB.8.1	Supply and lay graded crushed stone, 300 mm G7 material and compact to 93% Mod AASHTO	m3	162		

TOTAL CARRIED TO SECTION 5 SUMMARY: GRADED CRUSHED STONE

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Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 6 ROAD ASPHALT**PART ED ROAD ASPHALT**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.ED.1 PS.ED.5 PD.ED.8	Continuously graded wearing course of compacted thickness 35mm Sa-S10. Asphalt Private Plant	t	40		
2	PS.EB.8.2	Prime Coat 0.6litres/m2	m2	540		
3	PS.ED.7	Saw Cut existing road edge	m	30		

TOTAL CARRIED TO SECTION 6 SUMMARY: ROAD ASPHALT

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PART EF KERBS AND HAUNCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EF.8.1 PS.EF.1	Supply and lay Figure 12 kerb as edge restraint with 150mm wide channel/fillet for bellmouths. Kerb to be laid on 350 x 140mm 20/19 concrete foundation on grade 20/19.	m	50		
2	EF.8.1	Extra over item 1 and 2 for curves of radius less than 25 m	m	20		
3	AA.EF.8.1	Excavation for kerb and channel in existing asphalt layers	m3	20		

TOTAL CARRIED TO SECTION 6 SUMMARY: ROAD ASPHALT

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PART EH STEEL GUARDRAILS & CONC. MEDIAN BARRIERS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EH.8.1 PS.EH.1	Supply and install straight steel guard rails	m	10		
2	EH.8.1	Curved steel guardrails	m	4		
3	EH.8.1	End wings	no.	4		
4	EH.8.1	Precast concrete post. Rate to include excavation, backfill in materials, fixing, aligning and disposing of all access material	no.	6		

TOTAL CARRIED TO SECTION 6 SUMMARY: ROAD ASPHALT

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Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 7 PROTECTION WORKS**PART F PROTECTION WORKS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	F.8.1 PS.F.1	Imported topsoil: thickness 100 mm	m2	75		
2	F.8.6 PS.F.8 PS.F.10	Supply and installation of gabion baskets including stones (1m x1m x 1m)	m3	102		
3	PS.TA.1	Re-erect street/traffic signs and posts (including concrete foundation) stored on site	no.	2		
4	F.8.6 PS.F.10 PS.F.8	Gabion reno mattresses (300 mm thick). Rate to include excavations and backfilling	m3	24		

TOTAL CARRIED TO SECTION 7 SUMMARY: PROTECTION WORKS

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Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 8 NON PRESSURE PIPELINES AND PC CULVERTS**PART PG NON PRESSURE PIPELINES and PC CULVERTS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PG.8.2 PS.PG.1	Supply and lay 450 mm diameter concrete Class 100D	m	48		
2	PG.8.12 PS.PG.1	Supply and lay 600 mm diameter concrete Class 100D	m	25		
3	PG.8.12 PS.PG.5	Supply and lay 110 mm diameter sub-soil pipe	m	12		
4	PG.8.11 PS.PG.3	Drainage grade geofabric blanket as surround to subsoil drainage	m2	20		

TOTAL CARRIED TO SECTION 8 SUMMARY: NON PRESSURE PIPELINES AND PC CULVERTS

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PART PH MANHOLES and APPURTENANT DRAINAGE WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PH.5 PS.PH.5	Construct standard inlet and outlet headwalls as per drawing no. 38576	no.	4		

TOTAL CARRIED TO SECTION 8 SUMMARY: NON PRESSURE PIPELINES AND PC CULVERTS

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Flood Damage Remediation- Duiker Drive in Drummond, Ward 103

SECTION 9 ROAD SIGNS**PART TB ROAD MARKINGS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	TB.8.1.1	Painted road lines 150mm wide white (broken or unbroken) lines with retroreflective road marking paint including setting out and premarking.	m	30		
2	TB.8.1.2	Road Marking for lettering, symbols and traffic islands (white), including setting out lettering, symbols and traffic island markings.	m2	15		

TOTAL CARRIED TO SECTION 9 SUMMARY: ROAD SIGNS

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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 SITE CLEARANCE**

PART B	SITE CLEARANCE	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY**SECTION 3 CONCRETE WORK**

PART C	CONCRETE WORK	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY**SECTION 4 BULK EARTHWORKS**

PART	DA	EARTHWORKS : BULK	
PART	DB	EARTHWORKS FOR PIPE TRENCHES	
PART	DD	EARTHWORKS FOR STRUCTURES	
TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY**SECTION 5 GRADED CRUSHED STONE**

PART	EB	GRADED CRUSHED STONE	
TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY**SECTION 6 ROAD ASPHALT**

PART	ED	ROAD ASPHALT	
PART	EF	KERBS AND HAUNCHES	
PART	EH	STEEL GUARDRAILS & CONC. MEDIAN BARRIERS	
TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY**SECTION 7 PROTECTION WORKS**

PART F	PROTECTION WORKS	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY**SECTION 8 NON PRESSURE PIPELINES AND PC CULVERTS**

PART	PG	NON PRESSURE PIPELINES and PC CULVERTS	
PART	PH	MANHOLES and APPURTENANT DRAINAGE WORKS	
TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY

SECTION 9 ROAD SIGNS

PART	TB	ROAD MARKINGS	
TOTAL CARRIED TO FINAL SUMMARY			

SUMMARY OF BILL OF QUANTITIES**Section**

1	PRELIMINARY AND GENERAL		R	_____
	AA PRELIMINARIES	R	_____	
	AB GENERAL SPECIFICATIONS	R	_____	
	AH OCCUPATIONAL HEALTH and SAFETY	R	_____	
2	SITE CLEARANCE		R	_____
	B SITE CLEARANCE	R	_____	
3	CONCRETE WORK		R	_____
	C CONCRETE WORK	R	_____	
4	BULK EARTHWORKS		R	_____
	DA EARTHWORKS : BULK	R	_____	
	DB EARTHWORKS FOR PIPE TRENCHES	R	_____	
	DD EARTHWORKS FOR STRUCTURES	R	_____	
5	GRADED CRUSHED STONE		R	_____
	EB GRADED CRUSHED STONE	R	_____	
6	ROAD ASPHALT		R	_____
	ED ROAD ASPHALT	R	_____	
	EF KERBS AND HAUNCHES	R	_____	
	EH STEEL GUARDRAILS & CONC. MEDIAN BARRIERS	R	_____	
7	PROTECTION WORKS		R	_____
	F PROTECTION WORKS	R	_____	
8	NON PRESSURE PIPELINES AND PC CULVERTS		R	_____
	PG NON PRESSURE PIPELINES and PC CULVERTS	R	_____	
	PH MANHOLES and APPURTENANT DRAINAGE WORKS	R	_____	
9	ROAD SIGNS		R	_____
	TB ROAD MARKINGS	R	_____	

SUB TOTAL R _____

ADD VAT (15%) - (only if a registered VAT Vendor) R _____

TOTAL CARRIED TO FORM OF TENDER R _____