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BILL OF QUANTITIES**SECTION 1 Preliminaries and General****PART AA PRELIMINARIES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	GCC 2015	GENERAL CONDITIONS OF CONTRACT (GCC 2015) READ IN CONJUNCTION WITH THE CONTRACT DATA Fixed Charge obligations	sum	1		
2	GCC 2015	Time Related obligations	sum	1		
3	SANS 1921-1	SANS 1921-1 : GENERAL ENGINEERING AND CONSTRUCTION WORKS READ IN CONJUNCTION WITH THE ASSOCIATED SPECIFICATION DATA IN THE SCOPE OF WORKS Fixed Charge Items	sum	1		
4	SANS 1921-1	Time Related Items	sum	1		
5	C.1.2.3.1	COMMUNITY LIAISON OFFICER Allow for a CLO to be appointed.	PC Sum	68544	1.00	68,544.00
6	C.1.2.3.1	% Mark-up for item 5 above	%	68544		
7	C.1.2.3.4	LOCAL LABOUR Allow for the weekly submission of proof of employment of local labour	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: Preliminaries and General**R****PART AB GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.AB.14	Setting out	sum	1		
2	AB.4	Contractor's Camp Site / Store Yard	sum	1		
3	AB.7	Initial supply of all signs, barricades and delineators	sum	1		
4	AB.7	Maintenance of all signs, barricades and delineators	sum	1		
5	PS.AB.6	Cost of Samples and Contractor's Preliminary and Site Control Testing	sum	1		
6	PS.AB.9	Survey coordination of existing valves, manholes, catchpits, and cable duct markers	sum	1		
7	PS.AB.15	Temporary stream diversion and removal of stream diversion	sum	1		
8	PS.AB.8.10	Survey for, and Preparation of, 'As-Built' Drawings	sum	1		

Stream Protection Works near Isiphingo Grove Umlazi U Ward 86

Part Continued **PART** **AB** **GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
9	C1.2.3.7	Excepted Risks: Establishment	sum	1		
10	C1.2.3.7	Excepted Risks: De-establishment	sum	1		
11	PS.11	Site Security	sum	1		
12	PS.AB.16	Construction of site access for all machinery and materials to be used on site. Rate to include the maintenance of constructed site access throughout the duration of the project.	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: Preliminaries and General

R

PART **AH** **OCCUPATIONAL HEALTH and SAFETY**

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

TOTAL CARRIED TO SECTION 1 SUMMARY: Preliminaries and General

R

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SECTION 2 Retaining Wall Structure**PART B SITE CLEARANCE**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	B.8.2	General clearance and grubbing along the stream	m2	1100		
2	B.8.2	General clearance and grubbing in contractor's camp site	m2	100		
3	B.8.2	General clearance and grubbing in temporary stockpile area	m2	100		
4	B.8.2	General clearance of the site area and remove all debris such as gabbage and all debris	m2	1100		
5	B.8.2	General clearance and grubbing in road reserve	m2	10		
6	B.8.4	Removal of trees of girth exceeding 1,5 m	no.	20		
7	B.8.5	Removal of 1.5 m high wire mesh fence and store on site for re-use	m	10		
8	B.8.7	Removal of bollards and store on site for re-use	no.	5		
9	B.8.15	Removal of interlocking blocks in paved areas to store on site for re-use	m2	30		
10	B.8.16	Removal of kerb and channel/fillet to store on site for re-use	m3	5		
11	PS.B.12	Removal and handling of boulders within the stream throughout the duration of the project by contractors own methodology. Rate to include storage of boulders on site for reuse.	sum	1		
12	PS.B.13	Removal of planted sapplings or shrubs within the site access area which are then to be stored. Sapplings/shrubs removed are to be maintained and stored in a conducive location for the duration of the project. Rate to include removal, transportation, storage and maintenance of sapplings/shrubs.	sum	1		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

R

PART C CONCRETE WORK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	C.8.1	Grade 15/26 concrete blinding of thickness 75 mm	m2	670		
2	C.8.1	Grade 30/26 concrete in footings	m3	366		
3	C.8.1	Grade 30/26 concrete in walls	m3	266		
4	C.8.1	Grade 25/26 concrete in base slabs	m3	36		

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Part Continued **PART C CONCRETE WORK**

Item	Clause	Description	Unit	Quantity	Rate	Amount
5	C.8.2	High tensile steel reinforcement	t	35		
6	C.8.3	Class 3a shuttering to footings	m2	190		
7	C.8.3	Class 3a shuttering to walls	m2	1330		
8	C.8.3	Class 3a shuttering to base slabs	m2	30		
9	PS.C.8	Dowel bars installation	no.	60		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

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PART DA EARTHWORKS : BULK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.3	Excavate unsuitable material below embankments or formation to a depth of 1 meter and spoil at tip	m3	1215		
2	DA.8.3	Extra over above for excavation in hard material to fill	m3	30		
3	PS.DA.8.5	Backfill and compact using imported material from contractors own source to 93% Mod. A.A.S.H.T.O. Rate to include all haulage and royalties	m2	570		
4	DA.8.6	Trimming of embankments	m2	300		
5	DA.8.9	Formation	m2	750		
6	PS.DA.13	Prove existing services by hand excavation (provisional), where depth is: - - Over 0,0 m and not exceeding 1,0 m	m3	70		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

R

PART DC EARTHWORKS FOR CONCRETE LINED CANALS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DC.8.2	Excavate in all unsuitable material for gabions to spoil at an approved tip.	m3	248		
2	DC.8.3	Backfilling and compaction using material from contractor's own source to 93% Mod. A.A.S.H.T.O. Rate to include all haulage and royalties	m3	220		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

R

PART DD EARTHWORKS FOR STRUCTURES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DD.8.2	Excavate in all material for retaining wall to spoil at an approved tip.	m3	703		

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Part Continued **PART DD EARTHWORKS FOR STRUCTURES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
2	DD.8.3	Backfill and compact for retaining wall structure using imported material from contractor's own source to 93% Mod. A.A.S.H.T.O. Rate to include all haulage and royalties	m3	603.25		
3	DD.8.3	Backfill and compact for subsurface interception geocomposite drain system using imported material from contractor's own source. Rate to include all haulage and royalties	m3	90		
4	PS.DD.2	Design, installation and removal of a ground lateral support system to secure the excavated surfaces.	sum	1		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

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PART EL DUMPROCK SUBGRADE IMPROVEMENT

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EL.8	Dumprock subgrade improvement, 500 mm thick	m3	980		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

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PART F PROTECTION WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.F.4	Unpacking and reinstatement of existing gabion wall	m3	30		
2	F.8.1	Imported topsoil: thickness 100 mm	m2	200		
3	F.8.3	Grass planting	m2	200		
4	F.8.6	Supply and placement of Galvanised PVC Coated Gabion mattresses, 300 mm thick	m3	37		
5	F.8.6	Supply and placement of Galvanised PVC Coated Gabion boxes : 1000 mm depth	m3	180		
6	PS.F.3	Supply and place general grade	m2	2243		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure

R

PART PG NON PRESSURE PIPELINES and PC CULVERTS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PG.8.11	Drainage grade geofabric blanket as surround to subsoil drainage	m2	570		

Stream Protection Works near Isiphingo Grove Umlazi U Ward 86

Part Continued PART PG NON PRESSURE PIPELINES and PC CULVERTS

Item	Clause	Description	Unit	Quantity	Rate	Amount
2	PS.PG.11	Construction of subsurface interception geocomposite drain system consisting of 200 mm diameter HDPE sub-soil pipe for a length of 100 m and 110 mm diameter HDPE weepholes inclusive of no-fines concrete plug spaced at 1.0 m apart throughout 100 m of retaining wall.	sum	1		

TOTAL CARRIED TO SECTION 2 SUMMARY: Retaining Wall Structure R

Stream Protection Works near Isiphingo Grove Umlazi U Ward 86

SECTION 3 Reinstatement**PART S REINSTATEMENT**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	S.8.1	Reinstatement of ground surface on site. Rate to include regrassing of ground surface.	m2	200		
2	S.8.1	Reinstatement of ground surface on temporary stockpile site	m2	100		
3	S.8.2	Reinstatement of concrete sidewalk/ median - Precast slabs	m2	20		
4	S.8.2	Reinstatement of paved areas - brick paving	m2	30		
5	S.8.2	Permanent road reinstatement 150 mm sub base 50 mm Asphalt - Asphalt Private Plant	m2	10		
6	S.8.3	Reinstatement of type E kerb and channel/fillet stored on site. Rate to include replacement of any damaged kerbs.	m	5		
7	S.8.4	Reinstatement of bollards stored on site. Rate to include replacement of any damaged bollards.	no.	5		
8	S.8.4	Reinstatement of wire or plastic coated mesh fence, 1,5 m high stored on site. Rate to include replacement of any damaged portion of the fence or poles.	m	10		
9	PS.S.1	Reinstatement of ground surface and items removed/demolished along constructed site access. Rate to include all associated ancillary works.	sum	1		
10	PS.S.2	Reinstatement of minor services within site such as watermain, septic tanks and connections. Rate to include all associated ancillary works.	sum	1		
11	PS.S.3	Replanting of saplings/shrubs on site where removed. Rates to include transportation of saplings/shrubs from the storage location, digging, placement of saplings/shrubs, backfilling with suitable topsoil and watering	sum	1		

TOTAL CARRIED TO SECTION 3 SUMMARY: Reinstatement**R**

BILL OF QUANTITIES SECTION SUMMARY

SECTION 1 Preliminaries and General

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TOTAL CARRIED TO FINAL SUMMARY			

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TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY

SECTION 3 Reinstatement

PART S	REINSTATEMENT	
TOTAL CARRIED TO FINAL SUMMARY		

SUMMARY OF BILL OF QUANTITIES

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2	Retaining Wall Structure		R	
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C	CONCRETE WORK	R		
DA	EARTHWORKS : BULK	R		
DC	EARTHWORKS FOR CONCRETE LINED CANALS	R		
DD	EARTHWORKS FOR STRUCTURES	R		
EL	DUMPROCK SUBGRADE IMPROVEMENT	R		
F	PROTECTION WORKS	R		
PG	NON PRESSURE PIPELINES and PC CULVERTS	R		
3	Reinstatement		R	
S	REINSTATEMENT	R		
SUB TOTAL				R
ADD VAT (15%) - (only if a registered VAT Vendor)				R
TOTAL CARRIED TO FORM OF TENDER				R